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STATE MEDICAL JOURNAL

L. 10 NO. 10
TOBER, 1961

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Acute Streptococcus Pharyngitis* 88.3% 317 patients
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For adults and children over fifty pounds, the usual dosage is 250 mg. every six hours.

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Available as: Pulvules®—125 and 250 mg.†; Oral Suspension—125 mg.† per 5-cc. teaspoonful; and Drops—5 mg.† per drop.

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IN CERTAIN MENINGEAL INFECTIONS effective cerebrospinal fluid levels— effective antibacterial action

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In the management of certain meningeal infections, CHLOROMYCETIN offers unique advantages. It has been described by one investigator as "...the best chemotherapeutic agent for patients with *H. influenzae* meningitis...."[1] In comparative *in vitro* studies,[2] CHLOROMYCETIN showed the "highest effectiveness" against *Hemophilus influenzae, Diplococcus pneumoniae,* streptococcus, and numerous other pathogens. Another report states: "Chloramphenicol is regularly detected in the cerebrospinal fluid when blood levels greater than 10 micrograms per ml. are reached."[3] Blood levels of this magnitude are easily attainable with the administration of CHLOROMYCETIN by either the oral or parenteral routes.

CHLOROMYCETIN effectively penetrates the blood-brain barrier;[3-6] provides effective action against *H. influenzae*[1-4,7-9] and other invaders of the meninges.[5,7,10,11] Product forms are available for administration by the intravenous, intramuscular, and oral routes. For these reasons, CHLOROMYCETIN has contributed conspicuously to the dramatic drop in mortality rates in meningeal infections caused by *H. influenzae* and other susceptible microorganisms.

CHLOROMYCETIN (chloramphenicol, Parke-Davis) is available in various forms, including Kapseals® of 250 mg., in bottles of 16 and 100. See package insert for details of administration and dosage.

Warning: Serious and even fatal blood dyscrasias (aplastic anemia, hypoplastic anemia, thrombocytopenia, granulocytopenia) are known to occur after the administration of chloramphenicol. Blood dyscrasias have occurred after both short-term and prolonged therapy with this drug. Bearing in mind the possibility that such reactions may occur, chloramphenicol should be used only for serious infections caused by organisms which are susceptible to its antibacterial effects. Chloramphenicol should not be used when other less potentially dangerous agents will be effective, or in the treatment of trivial infections such as colds, influenza, or viral infections of the throat, or as a prophylactic agent.

Precautions: It is essential that adequate blood studies be made during treatment with the drug. While blood studies may detect early peripheral blood changes, such as leukopenia or granulocytopenia, before they become irreversible, such studies cannot be relied upon to detect bone marrow depression prior to development of aplastic anemia.

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MARYLAND
STATE MEDICAL JOURNAL
Volume 10 October 1961 Number 10

EDITORIAL

Social Security Not for Me!

I am opposed to the Social Security Tax for physicians for the following reasons.

Social Security is another tax collected on money that I earn. This money would be used not for my retirement, but to pay for the people in this program that have already retired. The money collected under the present schedules goes almost entirely to pay the daily expenses. Only one-eighth of the tax is held back for reserve.

There is no contract or guarantee that when I retire at age 65 or 70 there will be any funds available to pay for my retirement. The Social Security Act reads, "The right to alter, amend, or repeal, any provisions of this act is hereby reserved to the Congress." In 1958, over 400 bills were introduced in Congress to amend the Social Security Tax—in 1960, nearly 200 bills. The present schedule calls for a gradual increase in the tax rate so that by 1970 it will be 9 per cent of the first $4,800 earned. But this can be modified in any way, even to 20 per cent of $10,000, by a vote of Congress.

In addition to this uncertainty of the total cost and changes in the law, it is possible that I or my estate would not receive one penny of the money invested. My children are over 18, so if I should die my wife would not receive any money before age 62, but if she should remarry or die before age 62, the money stays in the pool.

Therefore, why should we physicians ask permission to invest money in a program in which we have no assurance as to the total cost nor what we will get back. It is worse than "wildcat" stock because once in, you can't get out! I have my own insurance program for retirement and do not want the added tax.

Another reason I am against the Social Security Tax is that it will be a heavy burden for my children and their children. Anyone who entered this system in 1937 and has retired, is receiving unearned money. Those who are in it now will pay only about 40 per cent of the money they can draw out. But your children and mine, the ones starting today at 18 and 29, will pay 170 per cent of the value they receive! When they find out it costs much more than private insurance, what are they going to do?

Well, they are going to modify the Social Security Tax or go all the way and make this a socialistic country where the government furnishes everything and everyone works for the government. They are also going to resent the

Reprinted from the Bulletin of the Montgomery County Medical Society, July, 1961.

"oldsters" for devising this pleasant utopia where they now take money that they haven't earned and let the fellow below pay for it.

What will they think of the doctors, physicians, one of the most educated classes of people, who have all of the facts available to them?

I hope it will never be written that the physicians *voluntarily* joined the great socialistic movement thinking that they were getting cheap government retirement and life insurance.

John G. Ball, M.D.

POSTGRADUATE COURSES AT THE UNIVERSITY OF MARYLAND

The following intramural postgraduate courses will be offered during the academic year 1961-1962 at the University of Maryland School of Medicine.

BASIC ELECTROCARDIOGRAPHY.

November 2-3-4, 1961
Under direction of Dr. Leonard Scherlis
Limited to 30 students. Fee $60.00

The basic principles of electrocardiography and the alterations produced by the common disease processes are presented in comprehensive fashion. Each physician is given a course manual. Intensive small group drills in interpretation of provided tracings follow the lectures. Instruction is thus highly individualized.

NEUROPATHOLOGY FOR PATHOLOGISTS.

November 13 through 17, 1961
Under direction of Dr. John A. Wagner
Limited to 12 students. Fee $125.00

Given at the practical level and including basic neuropathology, trauma, tumors, infections and degenerative diseases; surgical neuropathology; the neurological clinicopathological conference; and practical drill in cutting, blocking, staining, and microscopic study of provided specimens.

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The course will afford a basic review of diseases of the hematopoietic system. Illustrative peripheral blood and bone marrow slides will be provided each student in connection with selected case material. Newer techniques of diagnosis and treatment will be discussed.

Detailed information about each course will be mailed upon request addressed to The Committee on Postgraduate Education, University of Maryland School of Medicine, Baltimore 1, Maryland.

. . . a life-saving symbol

Ordinary lifesaving measures sometimes backfire tragically. An injection of tetanus antitoxin may be instantaneously fatal to someone who is allergic to the serum. Penicillin, too, is potentially lethal to five per cent of our population. This antibiotic causes one death every five days, as well as being responsible for half the nonfatal cases of all reported drug allergies. Millions of other people have conditions which require special treatment or drugs: hemophiliacs, arthritics and rheumatics, cardiovascular patients, diabetics, epileptics, and people with rare blood types, for example.

Such people may owe their lives to a bracelet or a disc bearing the red Medic-Alert symbol on one side and the appropriate medical warning on the reverse. The emblems, attractive and durable, flash an easily recognizable warning to anyone rendering emergency care.

The emblem was designed by Marion C. Collins, M. D., a California physician whose daughter nearly died from a violent reaction to tetanus antitoxin. He saw the need for a permanent warning device in case of future emergency. Thus he designed the silver bracelet with the information "Allergic to Tetanus Antitoxin" engraved on one side. To make it readily noticeable, he had emblazoned on the face, in red, the insignia of the medical profession and the words "Medic Alert."

Recognizing the widespread need for such a warning device, Dr. Collins consulted with physicians, nurses, law enforcement agencies, and national leaders; in April 1956 the Medic-Alert Foundation, International was established. It is a non-profit organization which is gaining worldwide recognition.

Upon payment of a $5.00 lifetime membership fee, a member is issued his choice of bracelet or medallion with his medical problem and his serial number engraved on the back. He also receives a membership card to carry in his wallet or purse. A central registration record is maintained in Dr. Collins's home town of Turlock, California. Here a duplicate of each membership certificate is recorded under the member's serial number and cross referenced under a name file. A 24-hour telephone service will accept collect emergency calls concerning members from doctors, hospitals, and public safety officials anywhere in the world.

The House of Delegates of the Medical and Chirurgical Faculty, at its September 1960 meeting, voted to encourage the use of the Medic-Alert emblem throughout the state. Physicians are urged to tell their patients about this protective device. Fire, police, and hospital emergency personnel are being alerted by means of prominently displayed posters to watch for persons wearing the emblem.

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ASYMPTOMATIC ENLARGEMENT OF THE PAROTID GLANDS DUE TO THE USE OF ISOPROTERENOL

A preliminary report of a study to correlate the use of Isoproterenol with swelling of the salivary glands.

Steven J. Borsanyi, M.D., and Cyrus L. Blanchard, M.D.

ASYMPTOMATIC ENLARGEMENT of the parotids has been reported in patients suffering from various endocrine and nervous diseases, nutritional and vitamin deficiency states, alcoholic cirrhosis, and a number of unrelated conditions such as pregnancy and lactation, menopausal states, cardiospasm, and celiac disease. It is also well known that certain drugs and heavy metals can cause selective enlargement of the salivary glands, especially the parotids. Lead and mercury poisoning and selective secretion of iodine are the best known among them. Thiouracil treatment for hyperthyroidism and thiocyanate treatment for hypertension also cause sporadic cases of parotid swelling.

Review of the literature and our investigations on enlarged parotid glands associated with alcoholic cirrhosis and diabetes revealed that the histologic changes are not characteristic to the underlying specific disease to such an extent that they would have diagnostic value other than to rule out specific diseases of the parotids (1, 2). The histologic picture is decidedly different from the normal, however. It generally consists of swelling of the individual acinar cells, increase of the secretory granules in the acinar cells, mitotic proliferation and cellular hypertrophy, and to less extent, fatty infiltration and moderate fibrosis. These changes are not constant and can occur in a variety of combinations.

A recent report by Selye et al (3) on the sialadenotrophic action of Isoproterenol in rats prompted us to investigate whether or not this compound has similar action on human subjects. This preliminary report covers the findings only in three patients receiving Isoproterenol, but new cases are constantly being added to our study. Two of our patients have chronic bronchial asthma and have been on Isuprel® (Isoproterenol HCl) inhalation for two and four years respectively. One of these patients also has a severe allergic rhinitis and moderately advanced emphysema, while the other patient has rather severe emphysema. The third patient had recurrent swelling of his submaxillary glands in addition to mild chronic bronchitis. He has not been on Isuprel®; but when he was recently given Norisodrine® (Isoproterenol Sulfate), considerable swelling of his submaxillary glands was noticed within five days.

Biopsy of the parotid from the first patient revealed hypertrophy of the gland with increase of the secretory granules in the acinar cells. Secretory sialography performed on this same patient gave a characteristic picture, which is best described as the "winter-tree" appearance of the duct system. The secretory sialography showed normal emptying time.

Although two of our three reported patients had emphysema, the relationship between pulmonary disease and parotid swelling is not unique. In Sjögren's disease, in addition to the changes encountered in the salivary glands and the eyes, the mucosal lining of the tracheo-bronchial tree is involved. Parotid swelling was also found in one-third of 94 patients investigated at the cardio-pulmonary laboratory at the University of Bologna for advanced emphysema (4).

The relationship between emphysema and parotid swelling is worthy of further study. Such relationships as swelling of the parotid to an underlying allergic process and to the use of expectorants containing iodine have previously been reported and now to the use of Isoproterenol in pulmonary diseases.

The role of Isoproterenol in the swelling of the parotid glands is not definitely established, whether it is merely a sialogoge or a selective stimulator of salivary gland growth. For further study of this question a series of animal experiments are under way to observe glandular changes. The result of this animal experiment will be correlated with the findings in a larger group of patients receiving this particular drug.

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CHANGING CONCEPTS CONCERNING CASTRATION AND BREAST CANCER

A discussion of the doctor's dilemma; prophylactic versus therapeutic castration in patients with breast cancer.

Edward F. Lewison, M.D.

IN THE TOTAL TREATMENT of breast cancer, the opposing principles of prophylactic versus therapeutic castration must be regarded as an unresolved matter of major conflict. After definitive surgery in premenopausal patients with operable breast cancer is it wise to perform prophylactic castration as an adjunct to radical mastectomy or is it wiser to reserve this procedure for the treatment of recurrent or metastatic disease? This is, indeed, the doctor's dilemma! Perhaps as long as the practice of medicine continues to be, as Osler has once said, "a science of uncertainty and an art of probability," the appropriate treatment for the appropriate patient will continue to be clouded by conflicting clinical judgment.

Endocrine ablation therapy in breast cancer began with the suggestions of Schinzinger (11) in 1889, who first recommended surgical castration in the treatment of advanced mammary malignancy. Beatson (2) published a remarkable report in 1896 advocating the treatment of inoperable breast cancer by the removal of both ovaries. He gave a detailed account of one patient, in which he said, "Eight months after my operation all vestiges of her previous cancerous disease had disappeared . . . "

Since then the rival merits of prophylactic versus therapeutic castration have been variously championed by a great many clinical investigators, most of whom were seriously hampered by the lack of a controlled clinical investigation. Space does not permit more than a mere mention of the contributions and statistical studies of Adair and his colleagues (1), Raven (10), Treves (14, 15,) Thayssen (13), Horsley (6), Douglas (5), Smith and Smith (12), McWhirter (8), and many others (3, 4, 7). From a thorough review of the medical literature it is apparent that *surgical castration* performed for therapeutic purposes in premenopausal patients with advanced, recurrent, or metastatic breast cancer does produce efficacious objective and subjective improvement. This palliative benefit, however, is unpredictable and time-limited, but has been reported to occur in between

Read in part at the Fourth National Cancer Conference, Minneapolis, Minnesota, September 13-15, 1960.

Over-all Survival Data For the Randomized Clinical Trial of X-Ray Castration In Patients With Breast Cancer

(From Paterson and Russell)*

Survival Period	Number of Cases		Percentage Survival		Statistical Significance
	Radiated Group	Control Group	Radiated Group	Control Group	
3-year	369	378	68.6	62.4	P=0.08
5-year	222	231	57.7	48.9	P=0.06
7-year	147	136	52.4	41.9	P=0.08

* Paterson, R. and Russell, M. H., Clinical Trials in Malignant Disease. Part II—Breast Cancer: Value of Irradiation of the ovaries. J. Fac. Radiol. London 10:130-133, 1959.

13 and 40 per cent of the patients undergoing oophorectomy. These differences in end results depend to some extent upon the enthusiasm of the individual investigator (a natural built-in-bias toward labeling "some geese as swans"), as well as upon the exacting criteria of clinical evaluation employed. For practical purposes, however, therapeutic castration by means of surgery should result in a regression rate of about 25 per cent.

The results of therapeutic castration performed by means of *ovarian irradiation* are more variable and less convincing. Clinically they are reported as being somewhat less effective than oophorectomy. However, as Huxley has said, this conclusion may be merely an irrationally held truth rather than a carefully reasoned error. Hormone assays indicate that x-ray castration is equal to surgical castration in decreasing the level of estrogen excretion. A period of perhaps several weeks to several months usually elapses before irradiation effectively reduces the estrogen excretion and then only in some cases. The role of the adrenal glands in secreting estrogens both before and after castration is known to vary widely. Also, there are many dietary sources of estrogen which may or may not be steroid in nature.

Perhaps faith in prophylactic castration springs from an intuitive feeling that delay breeds danger; yet the reported results of this ancillary procedure reveal a well defined trend toward a prolongation of survival time and an increase in survival rate. This effect was especially impressive in the carefully controlled clinical trial of random patients castrated by ovarian irradiation and recently reported by Paterson and Russell (9). Seven hundred and forty-seven patients with breast cancer, referred to the Christie Hospital for radiotherapy, who were premenopausal, at the menopause, or within two years of their last menstrual period and under 55 years of age were admitted to this study. Initially the allocation of patients to this clinical trial was made by random selection according to the stage of the disease and the age of the patient. Later this random sampling was simplified, and the selection was based on the patient's birthday alone.

The over-all survival results at three years for the total number of patients and at five and seven years for the more limited groups are indicated in Table I. The five-year over-all survival rate for the "radiated" group was 57.7 per cent; for the control group it was 48.9 per cent.

Although these end results are not considered statistically significant, it is "clearly suggested that there is some advantage" to prophylactic castration. More formidable measures of prophylactic castration, such as oophorectomy or even radical ovarian irradiation, may prove to be more effective, but they must await a large and carefully controlled clinical trial.

Although it is a crucial matter to determine which patients will be benefited by endocrine alterations and which patients will not, the caprice of this clinical response thus far remains unpredictable; far easier to see than to foresee. The mere reduction in circulating estrogens does not

appear to be the only critical factor. Objective improvement in premenopausal patients is by no means invariable after castration despite a marked decrease in estrogen excretion levels; conversely, objective improvement in premenopausal patients may occur without noticeable decrease in estrogen excretion levels.

In the minds of most women, the breasts and the ovaries have a special psychosexual significance. The impact of a mutilating operation such as radical mastectomy alone, with its natural inference of breast cancer, usually stirs up an intense emotional reaction. The addition of a second operation, such as prophylactic oophorectomy, within a short period of time may have a violently disruptive effect upon the patient's personality.

Thus, in this dilemma of prophylactic versus therapeutic castration the decision is difficult and our information is doubtful. Certain inferences are apparent, but it is hard to be confident of these conclusions. No prudent person would venture to be dogmatic regarding the best policy with the present evidence available. Yet, the gravity of the problem is vital and requires urgent clarification. Decisions must be made daily, and they cannot be dissipated by delay. If it can be conclusively shown that prophylactic castration (by either x-ray or surgery) enhances the long-term survival rate *substantially*, then I believe that we must regard this procedure as a most important change in our current concept of therapy. Should this eventuality become a reality, a prospect which is still open to considerable question, prophylactic castration would supersede therapeutic castration and would become an essential part of the primary treatment. Hormone therapy, adrenalectomy, and hypophysectomy would then be reserved for the palliative treatment of recurrent or metastatic disease.

Until then, however, we must accept the shadow for the substance and continue to place our confidence in:

> *The Doctors, who ought to know,*
> *Assure us that this might be so.*
> *Oh! Let us never, never doubt*
> *What nobody is sure about.*[1]

I strongly favor the cooperative group clinical study sponsored by the Cancer Chemotherapy National Service Center designed to determine the relative merits of castration in women with breast cancer. Thus, by means of a carefully controlled clinical investigation planned in accord with random selection, the vagary of castration in the treatment of breast cancer soon may be resolved once and for all. For in the total treatment of breast cancer, "When desperate ills demand a cure, distrust is cowardice and prudence folly."

Breast Clinic
The Johns Hopkins Hospital
Baltimore 5, Maryland

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[1] Paraphrased from Joseph Hilaire Pierre Belloc.

CARCINOMA OF BLADDER

TREATED BY DEEP X-RAY THERAPY, ELECTRORESECTION, AND FULGURATION

Frank T. Cawley, M.D., and Howard L. Tolson, M.D.

Figure 1

Right pyeloureterogram, February 22, 1951, patient H. R. W., showing filling defect 5 cm. in length in pelvic portion ureter; dilatation of ureter above the papillary ureteral tumor. Left pyeloureterogram normal.

Figure 2

Photograph of right ureteral papillary carcinoma, patient H. R. W., January 10, 1952.

MANY APPROACHES have been made to the treatment of malignancy of the urinary bladder, but the relief and management continues to be a difficult problem. We have reviewed the records of thirty-three consecutive patients treated between February 1938 and July 1959 at Memorial Hospital, Cumberland, Maryland. In our hands, the combination of deep x-ray therapy, fulguration, and electroresection has proven to be the most satisfactory method.

Preliminary Statistics: There were twenty-five men and eight women. The average age at the time of initial examination was 58 years; the youngest patient being 30 years and the oldest 78 years. All were white. None had been employed in the chemical industry.

Pathology: In all cases we have endeavored to secure tissue for microscopic study. In some instances the tissue sent to the laboratory was reported unsatisfactory or inadequate. When the specimens were satisfactory, the pathologist reported Transitional Cell Carcinoma. The tumors included in this study are papillary types, sessile and pedunculated, some single, many multiple, involving a small bladder area or apparently the entire vesical mucosa. We are in accord with the views of Colonel J. E. Ash, who reviewed 2500 cases of epithelial tumors of the bladder.[1] We wish to repeat the following statements from his report. "A satisfactory system of grading tumors, particularly the papillary ones, is very difficult to devise . . . We call them all carcinoma, papillary."

For a clearer presentation of the thirty-three patients, we have divided them into three groups, based on the extent of the neoplastic growth at the time of the initial examination. Group I consists of eleven patients with far advanced neoplasm at the time of the first examination. Not one of this group after careful examination was considered a suitable patient for treatment by cystectomy, either partial or total. Included in this group were patients with extensive spread in bladder and adjoining tissues and with metastases. Transurethral electroresection was used in this group solely as a method of procuring biopsy specimens. This group received deep x-ray therapy as a palliative measure. Each patient was individualized and examined by both of us before treatment was begun. The radiologist observed

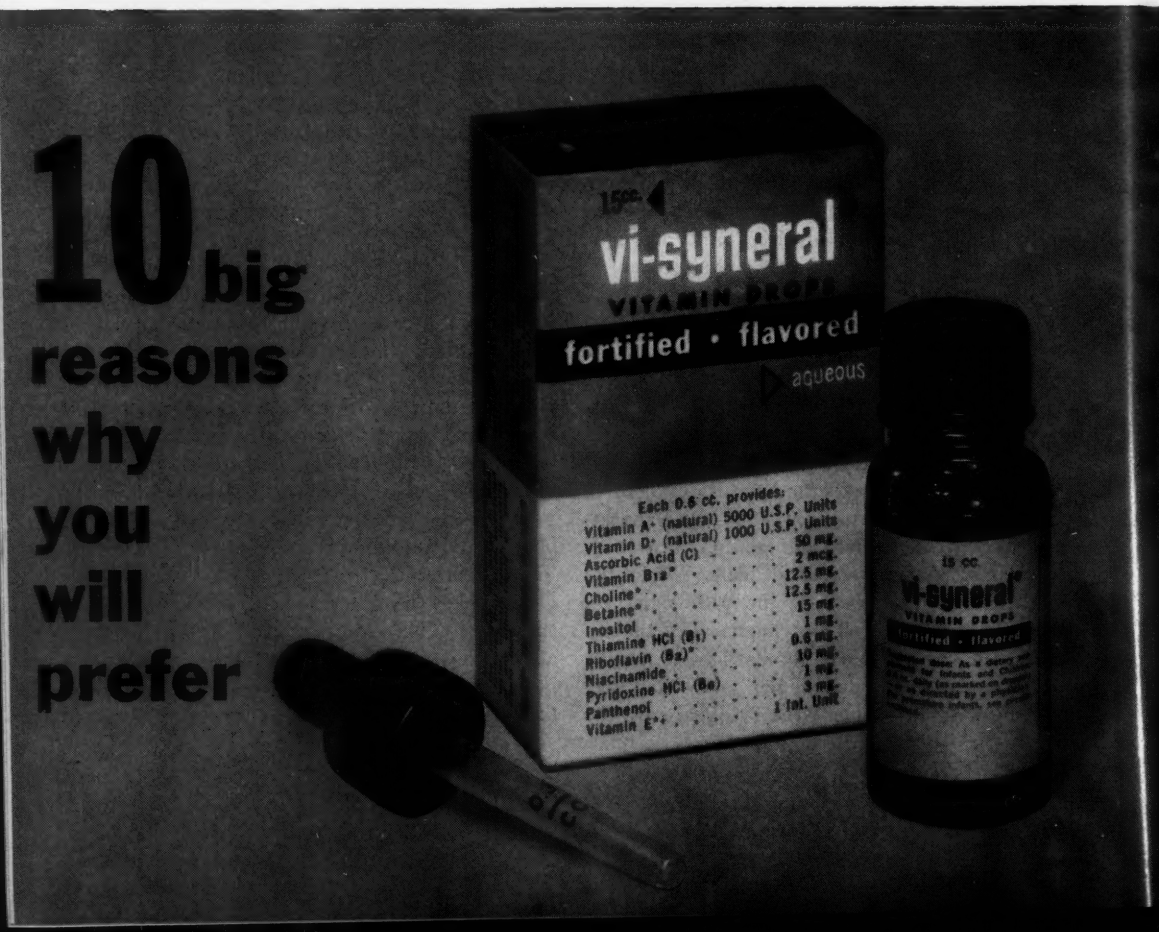
the lesions through a cystoscope with the urologist, and the urologist observed the patient throughout his course of therapy. Close proximity of both departments aided in this respect. With this advanced stage of neoplastic disease, x-ray therapy produced some decrease in bleeding and some relief of bladder distress in five patients. In these instances the improvement lasted but a short time. Three patients had only a few treatments, whereupon it was discontinued and considered not beneficial. Most patients in this group continued to show steady progression of the neoplastic disease. It appears that when this late stage has been reached, x-ray therapy in the dosage considered safe has little value. There is no surviving patient in this group.

In Group I, the far advanced patients, with only palliation intended, the average dose was 5,750 roentgens given over an average period of twenty-six days through a single anterior 10 x 10 centimeter portal.

Group II consisted of fifteen patients with neoplasms considered small enough to be destroyed by cystoscopic fulguration or transurethral electroresection. For the purpose of more thoroughly destroying neoplastic cells and diminishing the incidence of tumor recurrence, this group had a course of deep x-ray therapy after the cystoscopic treatments. All patients in this group were advised to have follow-up x-ray therapy. Twelve accepted the treatment, receiving an average dose of 4,675 roentgens over an average period of twenty-one days.

Results in Group II: Three patients did not return for cystoscopic follow-up examinations. Of the twelve patients who had follow-up examinations, six died of the carcinoma. Three patients are living. They are apparently free of vesical neoplasm, although all three have had multiple recurrences. Three patients who had bladders free of neoplasm died of cardiovascular disease.

Patient H. R. W., one of the Group II, has been producing papillary carcinomata frequently since he first came under our care February 6, 1927, at age 30. At that time, cystoscopic examination revealed a group of three sessile papillary growths in the right ureteral meatus region involving an



area about 3 centimeters in diameter. These were destroyed by fulguration. Bilateral pyelography revealed no pathologic changes in the upper urinary tract at that time. Follow-up cystoscopic examinations during the remainder of 1927 revealed no growth in bladder.

On June 2, 1928, cystoscopic examination revealed two small recurrent papillary growths involving right ureteral fold. These were destroyed by fulguration. The patient did not return until March 5, 1945, at which time cystoscopic examination disclosed a sessile papillary growth of about 1 centimeter in the right side of the trigone. This was excised with McCarthy resectoscope. The pathologist reported the tissue to be transitional cell carcinoma. On December 28, 1949, a sessile papillary growth on left side of the vesical orifice involving the trigone and prostatic urethra was excised with McCarthy resectoscope. On February 22, 1950, recurrent papillary growths in the trigone and prostatic urethra were destroyed by fulguration. Following this, he received a course of deep x-ray therapy to the bladder. On March 12, 1951, a right nephrectomy and complete ureterectomy was performed.

Figure 1 shows the pelvic portion of the ureter with a papillary growth 5 centimeters long with dilatation of the ureter above the neoplasm. The pathologist reported the growth to be transitional cell carcinoma showing slight infiltration.

Figure 2 shows two areas of recurrent papillary growths, one at the vesical orifice on the right side and one close to the left ureteral meatus which were destroyed by fulguration on January 10, 1952. In November 1953, two areas in the bladder and one in the prostatic urethra were fulgurated to destroy recurrent growths. Since April 1954, this patient has had the expert care of Hugh J. Jewett, M.D., who has performed diathermy excision and fulguration of numerous recurrent tumors in the bladder and prostatic urethra. The patient now thoroughly understands the importance of follow-up examinations and reports regularly to Dr. Jewett.

This patient has been growing papillary tumors in the urinary tract for thirty-four years. At this time, he reports that he is well. His weight is normal, and he carries on his usual occupation.

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We know that he will require follow-up cystoscopic examinations periodically throughout life.

Group III comprises seven patients who presented neoplasms at the time of their initial examination which were considered too extensive to be destroyed by cystoscopic fulguration or transurethral electroresection as the initial treatment. The tumors were often multiple. This group of patients had a course of deep x-ray therapy as the first procedure in tumor destruction. The average dose was 5,000 roentgens given over an average period of twenty days. All dosages were measured in air without back scatter. The factors used were 200 KV, 20 Ma, 50 cm. distance, with a filtration of 4 mm. Sn. The average portal used was 10 x 10 centimeters over the anterior bladder with an occasional perineal portal when necessary because of the extent or location of the tumor, skin tolerance, or another reason. After the skin reaction had subsided, usually about two months after the course of x-ray therapy, cystoscopic examination was repeated. The neoplasms were found smaller, less vascular, and more amenable to electroresection and cystoscopic fulguration. Hematuria had ceased during the period of x-ray therapy, and patients had become more comfortable.

This group of patients, although small, is composed of intelligent people who have grasped the importance of regular follow-up examinations. Six of the seven report regularly at the appointed time for cystoscopic examination or treatment. The one patient in the group who does not return regularly for follow-up cystoscopic examination continues under the care of his family physician, who stated February 7, 1961, "Mr. J. B. appears entirely well and has no symptom of urinary tract neoplasm." Mr. J. B. was 65 when he first came under our care, December 13, 1954. Intermittently, for two years previously, he had painless and total hematuria. Examination disclosed a sessile papillary growth occupying the left side of the bladder. The distal extremity of the neoplasm was not visualized, and it extended down to the vesical orifice. The left ureteral meatus was not seen. He received a complete course of deep x-ray therapy. When he was readmitted to Memorial Hospital on February 23, 1955, he had no complaint; hematuria had ceased during the period of x-ray treatment. Cystoscopic examination revealed a much smaller neoplasm with less vascular appearance and some white areas. Under novocain, subarachnoid analgesia much of the tumor was removed with a McCarthy prostatic resection instrument. The remaining tumor was thoroughly fulgurated. The pathologist reported the tissue as transitional cell carcinoma. The patient was discharged from the hospital on February 28, 1955. He returned at regular intervals for follow-up examinations and treatment until April 14, 1956. At that time his bladder appeared entirely normal and he had no complaint. Apparently Mr. J. B. is satisfied with his condition, but we have advised periodic cystoscopic re-examination.

All patients in this group of seven were treated by electro-excision (McCarthy resectoscope) and fulguration after the preliminary x-ray treatment. Five patients in this group have had one or more recurrent growths that required fulguration. Mrs. E. G., age 65 when she first came under our care on May 15, 1947, had a large sessile papillary carcinoma involving most of the left side of her bladder. After a course of deep x-ray therapy, the tumor was removed by electroresection and fulguration. On December 12, 1957, a small recurrent growth was destroyed by fulguration. The patient continues to have regular follow-up examinations, and a recent cystoscopic examination revealed a normal bladder. Her general health is excellent.

The seven patients in group III are living. Six have bladders without neoplasm. Mr. H. G., in this group, who was 67 when he first came under our care July 23, 1959, had a large recurrent growth in November 1960. He was referred to Hugh J. Jewett, M.D., for consultation and treatment. Dr. Jewett performed transurethral electroresection of the growth on November 30, 1960. When he was last examined February 24, 1961, the bladder appeared free of neoplasm. He requires cystoscopic examination at frequent intervals and fulguration when necessary.

Summary: Patients with far advanced papillary carcinoma of the bladder and urethra are not satisfactorily relieved by deep x-ray therapy. Some patients with far advanced disease have hematuria and bladder distress which can be controlled temporarily.

Patients with neoplasms too large for cystoscopic fulguration or electroresection as the initial method of tumor destruction can be satisfactorily relieved by a course of deep x-ray therapy followed by electroresection and fulguration. Such

patients afterwards require cystoscopic examinations at regular intervals and treatment as indicated. The incidence of recurrent growths is high, and may occur throughout the life of the individuals. Follow-up cystoscopic examination should continue throughout their lives.

In our experience, initial tumor treatment by fulguration and electroresection, followed by deep x-ray therapy, has given poorer results than with x-ray therapy followed by electroresection and fulguration.

This method of management has the advantage of continuing normal bladder function with the preservation of normal anatomy in the favorable patients.

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Virginia Medical Licensure Regulations

Maryland physicians who also practice medicine in Virginia should be sure that they have complied with the medical licensure regulations of the State of Virginia. The following is a simplified summary of requirements, as published in the Medical Bulletin of Northern Virginia.

1. All physicians who maintain an office, perform surgery, admit patients to a hospital, or sign birth or death certificates in the State of Virginia must have a valid license issued by the State Board of Medical Examiners.

2. Physicians who are licensed in a state with similar regulations may obtain a Virginia license by reciprocity and are not required to take an examination.

3. Borderline certificates may be obtained by physicians who are properly licensed in Maryland or the District of Columbia for occasional or emergency use. This certificate is not intended for the use of physicians who live, maintain an office, or regularly care for hospital patients in Virginia.

4. No local license is required of a physician called in consultation unless he should take over the management of the patient.

5. All license certificates must be registered with the clerk of the circuit court in the jurisdiction of the principal area of practice. Registration in some other part of the state is not adequate.

6. All physicians practicing under either the standard license or a borderline certificate are required to renew their certificate by paying $1.00 to the State Board of Medical Examiners before the first of July each year.

7. The practice of medicine without a properly registered license is a misdemeanor, and the consequences may be grave.

8. There are similar regulations in Maryland and the District of Columbia. Physicians who treat patients in a Washington hospital should have a standard District of Columbia license and not a borderline certificate.

Trial of TOLBUTAMIDE in the treatment of MULTIPLE SCLEROSIS

Thirty-three patients with known multiple sclerosis were treated with tolbutamide and a diabetic diet. Patients under therapy experienced both remissions and exacerbations. None of the dramatic changes seen in an earlier series were noted, which leads the authors to conclude that the changes seen in this series are more compatible with the natural history of the disease rather than any specific effect of therapy.

The authors would like to express their thanks to Orlyn Wood, M.D., of Montebello State Hospital, and to I. B. Lyons, M.D., of Western Maryland State Hospital, whose help and cooperation made this study possible.

RECENTLY, GLEN THOMAS SAWYER, M.D., reported a series of seven patients with known multiple sclerosis treated with tolbutamide and a diabetic diet (1). In all his patients marked improvement was seen with the institution of tolbutamide and a diabetic diet, which was immediately followed by an exacerbation of the disease with the institution of a placebo and a high carbohydrate diet. Upon reinstitution of therapy, remission of symptoms again occurred.

The remittent course of multiple sclerosis has long been known and, indeed, is one of the most valuable adjuncts to diagnosis; it has also constituted the greatest difficulty in evaluation of therapy in this disease (2). Even considering this, the series of changes noted with tolbutamide therapy is remarkable and appears at first glance to be due to more than chance alone. For this reason, an attempt was made to reproduce these results.

Methods

PATIENTS FOR THIS STUDY were collected from the demyelinating clinic of the outpatient department of University Hospital, from Montebello State Hospital, and from private patients of Doctors Charles Van Buskirk, Edward Cotter, and Kennedy Waller. Patients were selected only by their willingness to cooperate in the study and by the presence of multiple sclerosis. The patients were not screened by age, duration, or severity of disease.

Those patients admitted to the hospital underwent a lumbar puncture to determine total protein, cells, serology, and gamma globulin. Spinal fluid gamma globulin determinations were performed using the techniques of Roboz et al (3). Glucose tolerance tests and electro-encephalography were also performed on hospitalized patients in the study.

With the completion of the aforementioned studies all patients were placed on 500 milligrams of tolbutamide twice a day and an 1800 calorie diabetic diet consisting of 180 grams carbohydrate, 90 grams protein and 80 grams of fat. Daily neurological examinations were performed. If improvement had not occurred at the end of a week, the dosage was increased to 1.5 to 2 grams a day. If no change was observed, the patient was dis-

Arthur Lee Poffenbarger, M.D., Marie Andersch, M.D., and Edward F. Cotter, M.D.

charged, to continue on the diet and medications and to be followed in the clinic.

Inpatient Group

1. A 28-year-old white male had symptoms of multiple sclerosis for nine years, having experienced numerous remissions and exacerbations. Admission examination showed him to be mildly euphoric with scanning speech, nystagmus, and paraparesis of the lower extremities with bilateral extensor toe signs and patellar and ankle clonus. The patient was started on an 1800 calorie diabetic diet and tolbutamide, 500 milligrams twice a day. His condition remained unchanged for the first five days in the hospital. On his sixth hospital day he complained of complete inability to use his right leg and great difficulty in using his right arm. Examination at this time revealed weakness of the arm and increased weakness and spasticity of the leg. He was maintained on the diet and the tolbutamide and gradually improved over the next five days to the admission level of neurologic function. The patient has shown no subsequent change either with or without the medication.

2. A 32-year-old white male had multiple sclerosis since he was 17, with well-marked remissions and exacerbations until three years before admission, when his course became slowly progressive. Admission examination showed weakness and spasticity of the right upper extremity and both lower extremities, with no voluntary movement except with flexion of the toes of the left foot below the waist. One and one-half weeks after institution of tolbutamide therapy, while on 1.5 grams of tolbutamide a day, the patient noticed some improvement in the ability to use his right hand. He could flex his thigh at the hip for the first time in three years. His medications were maintained, but one week later he returned to his previous level. Two additional months of treatment produced no other change in his condition.

3. A 42-year-old white male has had multiple sclerosis with multiple remissions and exacerbations for the past twenty-three years. Admission examination showed horizontal nystagmus, ataxia, and intention tremor of the right arm, and hyperactive reflexes with extensor toe signs in the left lower extremity. He was maintained on therapy for two months with no significant change in his condition.

4. A 45-year-old white male had multiple sclerosis with remissions and exacerbations since 1949. He evidenced horizontal nystagmus, scanning speech, and paraplegia with urinary frequency. Three months of therapy produced no change in this patient.

5. A 43-year-old white female had multiple sclerosis since 1939, with frequent remissions and exacerbations. She was euphoric, with paraparesis, wide-based gait, positive Romberg with falling to the right, horizontal nystagmus, and urinary urgency and frequency. She was under treatment two months without change.

6. A 39-year-old white female had typical multiple sclerosis for ten years. On admission, she had diminished visual acuity, a horizontal nystagmus, and spastic paraplegia with urinary frequency and urgency. After two weeks of therapy she felt she had some improvement in her bladder control; this, however, was transient, lasting approximately five days, after which she returned to her previous level.

7. A 27-year-old white male had symptoms of multiple sclerosis since the age of 20, with frequent remissions and exacerbations. His course has been slowly progressive for two years. On admission he showed nystagmus, scanning speech, and a spastic paraparesis. After two months of therapy he had shown no objective improvement.

8. A 58-year-old white female had multiple sclerosis since age 38, with numerous remissions and exacerbations. She evidenced scanning speech, ataxia of both upper extremities, and paraparesis with urinary urgency and frequency. After two months of treatment she complained of increased difficulty with her bladder continence.

9. A 40-year-old white female had multiple sclerosis since 1955. On admission, she had horizontal nystagmus, spastic paraplegia, and ataxia of the arms. Reflexes were hyperactive throughout, with bilateral extensor toe signs. Her glucose tolerance test disclosed a diabetic curve. The patient was started on tolbutamide on December 2, 1960, and in approximately five days she showed some increased ability to use her upper extremities. This improvement was transient, and although she has been treated for the past four and one-half months, she has shown no further change.

TABLE I
SPINAL FLUID GAMMA GLOBULIN STUDIES, INPATIENTS

PATIENT #	TOTAL GLOBULIN	GAMMA GLOBULIN	% TOTAL GLOBULIN
1	78	7.2	10%
2	31	9.6	31%
3	36	12.0	33%
4	38	2.3	6.1%
5	35	5.6	16%
6	34	11.5	36%
7	56	16.8	30%
8	56	11.8	26%
9	31	.25	.8%

The gamma globulin in control spinal fluids fell within the normal limits given by Roboz.

All spinal fluid determinations, which were carried out before institution of therapy, are summarized in Table I.

Roboz et al (3) state that the average gamma globulin content and standard deviation of the spinal fluids of patients with multiple sclerosis is 12.6 $\pm$ 4.7 milligrams per 100 milliliters, with that of non-multiple sclerosis patients being 2.0 $\pm$ 0.8 milligrams per milliliter. A significant difference in the ratio of gamma globulin to total protein was also noted in multiple sclerosis patients, as opposed to patients with non-demyeli-

Table II

Glucose Tolerance Tests, Inpatient Group 100 Grams Glucose

Patient	Fasting Mgm. %	½ Hour Mgm. %	1 Hour Mgm. %	2 Hours Mgm. %	3 Hours Mgm. %	4 Hours Mgm. %	5 Hours Mgm. %
1	118	150	114	87	80	70	78
2	86	156	144	109	63	47	71
3	80	129	155	97	100	84	58
4	69	92	192	111	84	64	65
5	76	172	131	138	109	41	58
6	69	193	167	153	100	57	68
7	69	136	88	54	68	88	—
8	67	114	145	84	80	55	—
9	71	194	190	188	171	133	68

The above values are included for completeness and general interest only, since the small size of the inpatient group precludes any valid conclusions about the interrelationships between multiple sclerosis and the glucose tolerance curve.

nating diseases. In their series, patients with multiple sclerosis had 22.0 ± 15.0 per cent gamma globulins, as opposed to the non-demyelinating group who exhibited value of 4.5 ± 2.7 per cent. In the multiple sclerosis group, two general classes were noted: one with a high total protein content resulting in a low ratio, and one with a low total protein content resulting in a high ratio of gamma globulin to total protein.

It is of interest that the last mentioned patient, the only one in the inpatient group having a diabetic glucose tolerance test, is also the only patient showing drastic deviations from the above norms. No attempt is made to correlate or explain this situation at this time, but it raises the question whether or not this patient truly has multiple sclerosis.

Jones, Jones, and Bunch (4) concluded that there is an abnormality in the glucose tolerance curve of patients with multiple sclerosis and differentiate between those patients with active and quiescent disease. They state that those patients with active disease show elevation of the glucose tolerance curve throughout the entire course, while values in the quiescent group differ significantly from controls only in some elevation of glucose in the first and second hours. They note that since many factors affect glucose tolerance, such as diet and activity, caution was required in interpreting glucose levels.

Table III

Outpatient Group

Patient	Age	Sex	Remitting course	Duration	Principal involvement	Dosage of orinaze	Duration of RX	Results
10	47	M	yes	12 yrs.	Paraplegic with cerebellar involvement	500 BID	2 mo.	No change
11	39	M	yes	12 yrs.	Paraplegic with diplopia	500 BID	1½ mo.	No change
12	39	F	yes	5 yrs.	Paraparesis, blurred vision	500 BID	3 mo.	No change
13	17	F	yes	1 yr.	Scotomata, paraplegia, cerebellar involvement	500 BID	2 mo.	No change
14	34	M	yes	9 mo.	Paraplegia, scanning speech	500 BID	1 mo.	No change
15	52	M	yes	5 yrs.	Paraparesis	500 BID	2 mo.	Increased weakness, dorsiflexors rt. foot
16	27	F	yes	9 mo.	Paraparesis, para-anesthesia	500 BID	2 mo.	No change
17	33	F	yes	3 yrs.	Paraparesis	500 BID	2 mo.	No change
18	34	F	yes	2 yrs.	Monoplegia, lt. leg, intermittent diplopia	500 BID	2 mo.	No change
19	41	F	yes	2 yrs.	Paraparesis, diplopia, scanning speech	500 BID	1½ mo.	No change
20	48	M	yes	6 mo.	Paraparesis, Diabetic G.T.T.	500 QID	1 mo.	No change
21	16	F	yes	3 yrs.	Cerebellar ataxia, frank diabetic	500 TID	2 mo.	No change
22	48	M	yes	2½ yrs.	Paraparesis	500 QID	2 mo.	No change
23	27	M	yes	5 yrs.	Paraparesis	500 QID	2 mo.	No change
24	39	F	yes	10 yrs.	Nystagmus, intention tremor, paraplegia	500 BID	2 mo.	No change
25	28	F	yes	7 yrs.	Diplopia, paraplegia	500 BID	1½ mo.	No change
26	40	F	yes	10 yrs.	Paraparesis	500 QID	5 mo.	Paraparesis worse
27	42	M	yes	2 yrs.	Ataxia, l. foot drop	500 BID	2 mo.	Gait less ataxic

Table IV

Western Maryland State Hospital Group

Patient	R	S	A	Age at onset	Involvement	Course	Drug	Duration	Glucose tolerance (initial)					Spinal fl. protein	Dietetic diet	Remarks
									Fasting	½ h	1 h	2 h	3 h			
28	W	F	41	34	Paraplegic	Slowly progressive	Tolbutamide Placebo	5 weeks 7 weeks	94	202 Not Re	181 peated	149	129	33 mg. %	1240 cal. 1240 cal.	No appreciable change No appreciable change
29	W	F	44	34	Paraparesis	Slowly progressive after initial remitting course	Placebo Tolbutamide	5 weeks 7 weeks	100	191 Not Re	238 peated	300	186	36 mg. %	1800 cal.	Endurance improved* Endurance decreased*
30	W	F	47	41	Paraplegic with nystagmus	Remitting & exacerbating course	Tolbutamide Placebo	5 weeks 7 weeks	100	167 Not Re	167 peated	158	137	26 mg. %	1800 cal.	No appreciable change Decrease in spasticity. Increase in ocular symptoms*
31	W	F	65	60	Paraplegic	Slowly progressive after initial remitting course	Placebo Tolbutamide	5 weeks 7 weeks	94	145 Not Re	176 peated	158	145	51 mg. %	1800 cal. 1800 cal.	No appreciable change Decrease in spasticity*
32	W	F	49	43	Paraparetic Scanning speech	Remitting & Exacerbating course	Placebo Tolbutamide	5 weeks 6 weeks	94	137 Not Re	158 peated	141	91	43 mg. %	1800 cal. 1800 cal.	No appreciable change Improvement in speech*
33	W	F	32	30	Paraplegic urinary incontinence	Remitting & exacerbating course	Tolbutamide Placebo	5 weeks 7 weeks	100	158 Not Re	129 peated	137	104	31 mg. %	1800 cal. 1800 cal.	Decrease in spasticity* No appreciable change

Henneman, Altschule, Goncz, and Alexander (5) also reported moderate impairment of glucose tolerance in M. S. patients, with a lag in the return to fasting blood level of true blood glucose. The results of the glucose tolerance tests in the inpatient group are recorded in Table II. Glucose values were determined by the Samogyi-Nelson procedure.

In addition to those patients studied in the hospital, a larger group of patients was followed on an outpatient basis. Insofar as was possible, this group was treated in a manner identical to the inpatient group. An attempt was made to maintain these patients on an identical diet, but control was much less complete here than with the inpatient group. The data for this outpatient group are summarized in Table III.

A group of six patients at Western Maryland State Hospital, all with unequivocal multiple sclerosis, were included in a double blind study utilizing tolbutamide and identical placebos. Diet was maintained as a constant throughout this phase of the study. Patients were placed on either tolbutamide or placebo for a five week period and then alternated. Observations on this group of patients are summarized in Table IV. It is apparent that little difference was noted between responses to placebo, tolbutamide, and no therapy.

Discussion:

Nathanson (6), discussing the difficulties of evaluating therapy in multiple sclerosis, suggested two possibilities for effecting control. The first involves counting the number and frequency of exacerbations and remissions in a treatment group and comparing them with a group of patients receiving no treatment. The second method of control, which he felt was unsatisfactory, involves using the patient's own past performance as a control.

In a series of four hundred and seventy-five patients, McAlpine and Compston (7) found that the average rate of exacerbation was 0.39/year. They noted that the rate of exacerbation varied with the duration of the disease, with exacerbations being most frequent in the second, third, and fourth years, with the following exacerbation frequencies of 0.42, 0.34, and 0.33 per year.

Thygesen (8) reported that on an average exacerbations occurred about every ten months. Putnam reported an exacerbation rate of 0.6/year.

In this series, a total of thirty-three patients, including four patients with either frank diabetes or a diabetic glucose tolerance curve, were given a trial therapy of tolbutamide and a diabetic diet. Duration of therapy varied from one to five months and the dosage from one to two grams of tolbutamide a day. Duration of the disease varied from six months to more than twenty years and included patients both in the active and quiescent phases of the disease.

The total patient months of therapy was 78, or 6.5 years, with the average months of therapy per patient being 2.36. In the group, remissions occurred at the rate of one for each 11.1 months of patient treatment, or 1.07 remissions per year of patient treatment. There was one exacerbation for each 15.6 months of treatment, or, expressed otherwise, 0.7 exacerbations per year of patient treatment.

It is felt that the rates of remission and exacerbation noted in this series of patients compare closely with control values noted in the literature. Considering this, any changes noted could be entirely compatible with the course of the disease rather than being due to any effect of treatment.

Although the time of observation on therapy is too short to be treated in a statistical manner, only seven of the thirty-three patients experienced a remission, and of these none maintained this improvement on continued therapy.

No difference in response was observed in the four patients who had abnormal glucose tolerance curves.

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ARTICLE OF INTEREST

THE UNLOCKED HOSPITAL

"Open door" hospitals seek to eradicate the stigma associated with psychiatric illness and thereby encourage early treatment of mental disorders. Early in 1960 the author visited a number of such hospitals in England and reports here his observations and impressions.

George F. Sutherland, M.D.

THE "UNLOCKED HOSPITAL" is a cliche designating a remarkable public relations program instituted by certain resourceful psychiatrists with the avowed aim of erasing the stigma commonly associated with psychiatric illness, in order to facilitate the early treatment of patients who suffered from this type of disorder. The "open door," as it is sometimes called, was the result of such endeavor. This innovation with respect to the creation of an atmosphere in which those with mental disease could be treated as other patients was painstakingly evolved over a span of years, not as the result of a *fiat* that the doors shall be unlocked.

It seems that the system of the open door originated in Holland (Amsterdam Plan) and may well have been the result of the lack of conventional mental hospital facilities. Soon after World War II, the idea was embraced by Dr. T. P. Rees, at that time medical superintendent of Warlingham Park Hospital at East Croyden, England. By dogged persistence and steadfastness of purpose, he succeeded over a period of years in overcoming the resistance of tradition, so that at the present time not a single door in this hospital is locked. His determination that mental patients be treated with the same respect accorded patients suffering from other ailments thus became a *fait accompli*. The success of this experiment has set the fashion in the treatment of nervous complaints.

Beginning in the south of England, the idea has taken hold, and several of the mental institutions have adopted the policy of the open door. I visited a number of these.*

Before going into the details of the open hospital, I should explain that the practice of medicine under the National Health Service in England affects somewhat the operation of the system of treating mental illness as distinguished from our own. I had the good fortune of meeting again the Hon. Walter Maclay and hearing him explain the main features of the new Mental Health Act, which is the first revision of that statute since 1845 and which went into effect November 1, 1960. There is a Central Authority under the guidance of Dr. Maclay which administers the general provisions of the Act. Next comes the

*Netherne Hospital, Couldson, Surrey; Warlingham Park, East Croyden; Mapperly Hospital, Nottingham; General Infirmary at Leeds; Burden Neurological Institute, Bristol; Graylingwell Hospital, Chichester; St. Thomas's Psychiatric Outpatient Department and Inpatient Unit, London; Guy's Hospital, London; Maudsley and Royal Bethlehem Hospitals, London.

Regional Authority with supervisory powers to coordinate the activities of several shires (4-5). Finally, there is the Local Authority, which actually carries out the provisions of the Act for (in a loose sense of the term) the county. The various medical installations come under the Local Authority.

Most physicians practice under the National Medical Service. Private practice is becoming progressively more rare because patients have learned that virtually the same care without charge can be had under the National Service. The Act provides for the operation of mental hospitals, day (also night) hospitals, hostels, centers for children, of which there are some four hundred with residential accommodations, day centers for elderly patients, social clubs, and out-patient clinics, most of which are operated in connection with the outpatient department of a general hospital. Each of the non-professional provisions of the National Mental Service is carried out under the aegis of the Local Mental Health Authority Officer, with a staff of assistants, in conjunction with the County Council, since the cost must be borne on a local level. A medical superintendent, who is responsible to a hospital board (local), is in charge of a mental hospital and associated outpatient clinics and day hospitals. The L.M.H.A. Officer is responsible to the regional authority.

There are roughly three pay scales for a practicing physician in England: the lowest being that of the general practitioner, next the specialist (DPM), and the highest the consultant who possesses some additional qualification; e.g., professor. To qualify as a specialist requires at least two years training as registrar (resident) in an approved center and passing the examination for the Diploma in Psychological Medicine. Appointments as consultants are difficult to obtain because the requirements are quite stiff.

Incidentally, in order to qualify as a psychiatric nurse, two years additional training is required in a hospital specially designated for such training.

Since the practice of psychological medicine in England will be influenced to a great extent by the provisions of the new National Mental Health Service Act, it was interesting to hear the Hon. Walter Maclay outline the policies which it is intended to implement. The first was to try to eradicate the stigma attached to mental illness. Therefore, an attempt will be made to see patients earlier in the hope of cutting short the course of the illness. Special emphasis will be placed upon preventive aspects. Outpatient treatment will be encouraged while certification (commitment) will be discouraged, in order to preserve the dignity of the individual. He explained that the large mental institution came about during the last century by action of the London County Council, who, in the interest of what they considered economy, ignored the advice of the medical profession. Future construction plans do not include present installations but rather the establishment of smaller units in the order of three hundred to four hundred beds for short-term cases (three months or less) and a few not of more than one thousand beds for chronic patients who cannot live outside a hospital setting. The small units will be within easy reach of the patient's home in order to permit visiting and to maintain the home and community ties. The problem of overcrowding will be met by more medical staff, not by providing more beds. At the present time, it is estimated that 90 per cent of admissions are discharged within one year. In anticipating future requirements, it is estimated that per 100,000 population, three hundred to four hundred beds will be necessary to accommodate short-stay patients and about one thousand beds for the chronically ill and the elderly patients who become a burden to their family or to the community because of their infirmity. More outpatient services, especially in general hospitals, more day hospitals, and more domiciliary care (home visits) will be required of the social worker and occasionally of the physician.

The staffing pattern of the mental hospital is not unlike our own. A medical superintendent is assisted by an administrative officer for non-professional duties; a matron supervises the nursing on female wards, but a male chief nurse has corresponding duties for the male wards. The latter two seem to be invested with more responsibility than is common in this country, perhaps because the psychiatric nurse receives two additional years of training.

The medical superintendent apparently combines the duties of head of the hospital and that of clinical director. He is able to do this because he is concerned almost entirely with professional affairs. At about weekly intervals he meets with (1) the nursing staff, (2) the new patients and those who have questions or complaints, and (3) the physicians. Occasionally he may visit a pros-

pective patient in the home or interview relatives or patients with respect to some special problem.

The physicians including the registrars (residents) do not spend all their time at the hospital but attend the outpatient clinics and the day hospitals. They usually see the patients before he is admitted to the hospital to determine whether he should be admitted or treated in the outpatient department. The same physician sees the patient before he is admitted, during his stay in the hospital, and after he leaves the hospital. The physician's duties are almost entirely professional. Paperwork is not repetitious, since there is only one case history folder for each patient, which is prepared in the outpatient department by the doctor and accompanies the patient wherever he is treated. Much use is made of printed forms, on which the findings and other information are checked off. Comparatively speaking, there is much less written work in the case report than is found in our folders.

Within the framework of the policy laid down by the medical superintendent, the matron and the chief male nurse establish their own rules for ward operation. In most instances, the decision whether or not the door is "open" or "closed" is made by them.

In the hospitals that I visited, psychologists confined their efforts to testing and to diagnostic procedures and research. They did not take part in the therapy.

Social workers, it would appear, spent little time in the hospitals. They were often the first person who had any contact with the patient or relatives and frequently were the source of referral to the physician, clinic, or hospital. They prepared a social history, which was usually the earliest notation in the case folder. They made home visits before and after hospitalization. The patient was in truth their client for whom they felt a responsibility of seeing that he was receiving the benefits of whatever services were available.

I gathered that as soon as the hospitalized patient was ambulatory he came under the guidance of the occupational or recreational therapist. This seemed to play a major role in the overall treatment program in the inpatient service and in almost the entire program in the day hospital.

The primary aim of the open hospital system is to preserve the ego. It was soon realized that however effective such a measure might be within the therapeutic milieu, it could be entirely undermined by a negative familial and community reaction. As a consequence, it has been necessary to devote a great deal of thought and energy to involving the family and the community in an overall therapeutic effort. It is interesting to note that a community in which an open hospital is operating gradually comes to accept an increasing responsibility to see that the system prevails.

Without this community support the open hospital could not long exist, because the therapy must continue beyond the strictly medical regime. If family and friends are reluctant to accept the individual after hospitalization or if employers are hesitant to employ him, he has no place to go except to return to the hospital. Sometimes a patient has been out of circulation for such a long period that community ties are virtually nonexistent. Here the hostel or psychiatric social club can help in restoring social contacts and establishing a place in society.

Reintegration into community life begins before the patient leaves the hospital. Visiting by friends and relatives must be encouraged to help preserve his place in the community. This means that he must be hospitalized close to his home, for the number of visitors and the frequency of visits is roughly proportional to the proximity of the home. Rehabilitation programs are necessary, particularly for the chronic patient who is timid about engaging in social intercourse. Some hospitals in England have found that this aspect could be implemented by having both sexes share the same dining hall and recreational activities. Even "back ward" patients responded by a noteworthy improvement in their personal appearance, table manners, and general observance of the social amenities. There was a striking decrease in incontinence!

The staff takes an active part in the rehabilitation program. Both a male nurse and a female nurse participate along with a social worker and physician. The recreational therapist arranges chiefly mixed gatherings, such as games, plays, contests, and dances. With the younger patients physical exercise plays a prominent part in the activities. Industrial therapy is used particularly in the case of chronic patients, sometimes to reactivate good work habits and sometimes to actually teach trades.

In attempts to return the patient to the community it has been found that medical measures

(ECT, insulin, and drugs) are effective when used in the early stages of the disease but lose their efficiency as the disease progresses. By contrast, the most effective measure in chronic illness are the social therapies.

The hospital buildings are almost uniformly of an ancient vintage, constructed on a similar plan with wards of about thirty beds connected by a corridor which opened (formerly seclusion) to rooms. Each group of wards is interconnected by long passageways. One could envisage what these must have looked like in the old days of security and custodial care but there has been a great change. The bars on the windows have been replaced by attractive curtains; the walls were done over in pastel shades; cement floors were covered with colorful asphalt tile; occasional rugs added to the pleasing effect in the dayrooms; modern comfortable furniture had replaced the old. The entire place has more the appearance of a club than a mental hospital and is free from unpleasant odor that commonly pervades chronic wards. Everything is spotless, including bathrooms.

Each ward has a small serving kitchen which the patients use to prepare the midmorning coffee and the afternoon tea. In addition, there is a utility room for those who wish to wash and iron their clothes. Each patient has his own locker for his personal effects. Patients wear their own clothes. (If they do not have any suitable clothing, the hospital personnel purchase whatever is required from a *regular* store.)

The main meals are prepared in a central kitchen and distributed to the wards by heated food carts. In general, these are served in cafeteria style. The dishes belong to the wards and are washed in the serving kitchen. Food is emphasized as a means of helping the patient regain his best weight.

The patients attend to the light housekeeping chores on the ward and assist in the preparation of the midmorning coffee and afternoon tea and sandwiches. Each patient receives a small allowance—cigarette money, but may increase his earnings by additional work on the grounds or in the industrial shop, where "home type" piece work is done. (I was surprised to see one project of assembling knives.) Where skilled or semi-skilled projects were being done on a commercial scale the whole matter had first been discussed with the Union, which raised no objection in view of the therapeutic implication involved.

The aim of the activity is to engender by degrees the ability, the confidence, and the responsibility to look after oneself. This is seen taking shape in the convalescent patient's assisting and encouraging others who have not yet reached that stage of improvement. Each ward selects from its number representatives, for example, to the food service, to present suggestions for improvement and lodge complaints. This democratic procedure involves most of the patients in the welfare of the hospital and, further, tends to maintain a high level of morale. The orderliness and the behavior of the patients and staff alike reflect a spirit of friendly cooperation without which the entire operation would suffer.

This frank approach to problems is also seen between doctor and patient. No procedure is embarked upon without being fully discussed with the patient beforehand. Each patient knows, for example, what medication he is receiving and usually the precise dose. If the patient is so irrational that he cannot appreciate what is being said to him, he may be treated without his consent for a period of three days, which may be extended for another fourteen days with the approval of the Local Authority Officer. If during this time he makes no improvement, certification (commitment) may be resorted to in order to continue the treatment.

The non-professionl aspects of the hospital administration are under the supervision of an executive officer (under a variety of titles), who reports to a local board that finances the operation. He functions under the medical superintendent but exercises a great deal of autonomy at the same time. He takes a great deal of pride, especially in competition with other installations, in providing modern innovations, the latest equipment, and efficient staffing. Frequently, he is unable to meet the expenditure through the allotment by the Board, whereupon he takes it upon himself to secure the necessary funds through other sources, such as volunteer organizations. (I could not help noting that even the bus driver had been enlisted as an enthusiastic salesman for the hospital.)

The treatment of alcoholics is an active service directed rather than run by the physician in charge. Patients are voluntary. Warlingham Park Hospital has about twenty beds for inpatients. Most of the treatment is carried out by group therapy in two classes: one for recent admissions

and one for those who had been under therapy longer. There is a close association with AA, together with a follow-up program run by the hospital. Once the patient's physical health has been restored (sometimes including aversion treatments) emphasis is placed on the danger of relapse by taking that first drink.

The treatment of the elderly patient requires special mention because the actual time spent in the hospital can be reduced by resorting to alternative measures. In the first place, the patient may not require continuous hospitalization and can spend the intervening periods either entirely at home or in the home and the day hospital. The procedure will be outlined, as an example, in Nottingham, where no patient is admitted until he has been visited in the home by the medical superintendent. An agreement is made to take the patient in the hospital for one month. If at the end of the month he is not well enough to return home, the relatives are so advised and he remains for another month.

When the home visit is made, the circumstances are evaluated, and the patient is admitted for one month in order "to give the housewife a rest." This gesture creates a willingness to receive the patient once more in the home, much as with any other chronic patient after an acute episode is over. It also militates against the attitude of trying to get rid of the patient permanently. The relatives have learned that they can look to the hospital for temporary relief when the situation at home becomes trying. This is truly an example of mental hygiene carried into the community. (The same is true often in the case of schizophrenic patients).

The day hospital serves a similar purpose in permitting the home to function normally. The elderly person can upset the home by requiring continual attention, much as a child, preventing the houeswife from working, and thus endangering the economic position of the establishment. In the morning a station wagon calls for the patients and brings them to the day hospital. On their arrival they are served breakfast and subsequently luncheon and tea. During the day various recreational activities are provided, as well as medication if necessary. In the late afternoon they are returned home. An additional advantage is gained by having the patients under observation and appropriate supervision so that serious complications may be checked in their inception.

The efficiency of the open hospital is enhanced by an associated outpatient service that actively treats the patient in the early stages of the illness, using ECT, insulin, methedrine abreaction, as well as drugs and psychotherapy. In such installations in England these are begun at once either in the outpatient department or in the hospital, mostly in the former. After the patient leaves the hospital, treatment is continued as necessary on an outpatient basis. The patient may have several admissions to the hospital during the course of therapy. Often this may be to give modified insulin therapy in order to rapidly restore any weight lost. A brief hospitalization to perform leucotomy may supervene during the outpatient treatment. Leucotomy is used particularly in the care of an "agitated" chronic patient who has shown no improvement over a prolonged period. The selection of patients for this procedure is limited to those who have a previous history of good work habits and adequate social adjustment.

Statistical evidence indicates that disease of long duration, such as schizophrenia, has become fixed and, as a consequence, is resistant to the most energetic medical therapy. In addition, the longer the patient remains in the hospital, the more difficult is his return to the community. He becomes "institutionalized," developing reluctance, fear, and inability to leave the hospital.

It is well known that the individual who voluntarily seeks treatment is a much better candidate for therapy than one upon whom treatment is forced by commitment. Commitment (certification) is a most ego-deflating maneuver, for it means that the patient has lost control of his life situation. It is little wonder, therefore, that he is unlikely to be cooperative and, in fact, may be quite antagonistic toward those who are striving to help him. Moreover, experience has shown that when an individual is deprived of freedom and responsibility he is apt to become dependent and irresponsible. Such an attitude robs him of his will to get well. One of the chief advantages of the open hospital is that it promotes early treatment of psychiatric disorders by diminishing the stigma often associated with mental disease.

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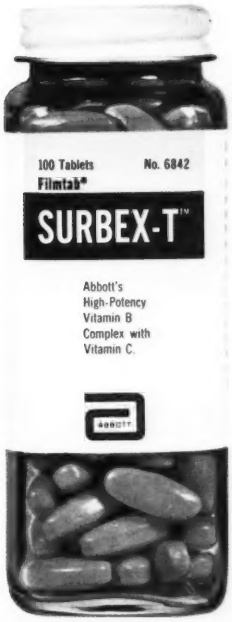

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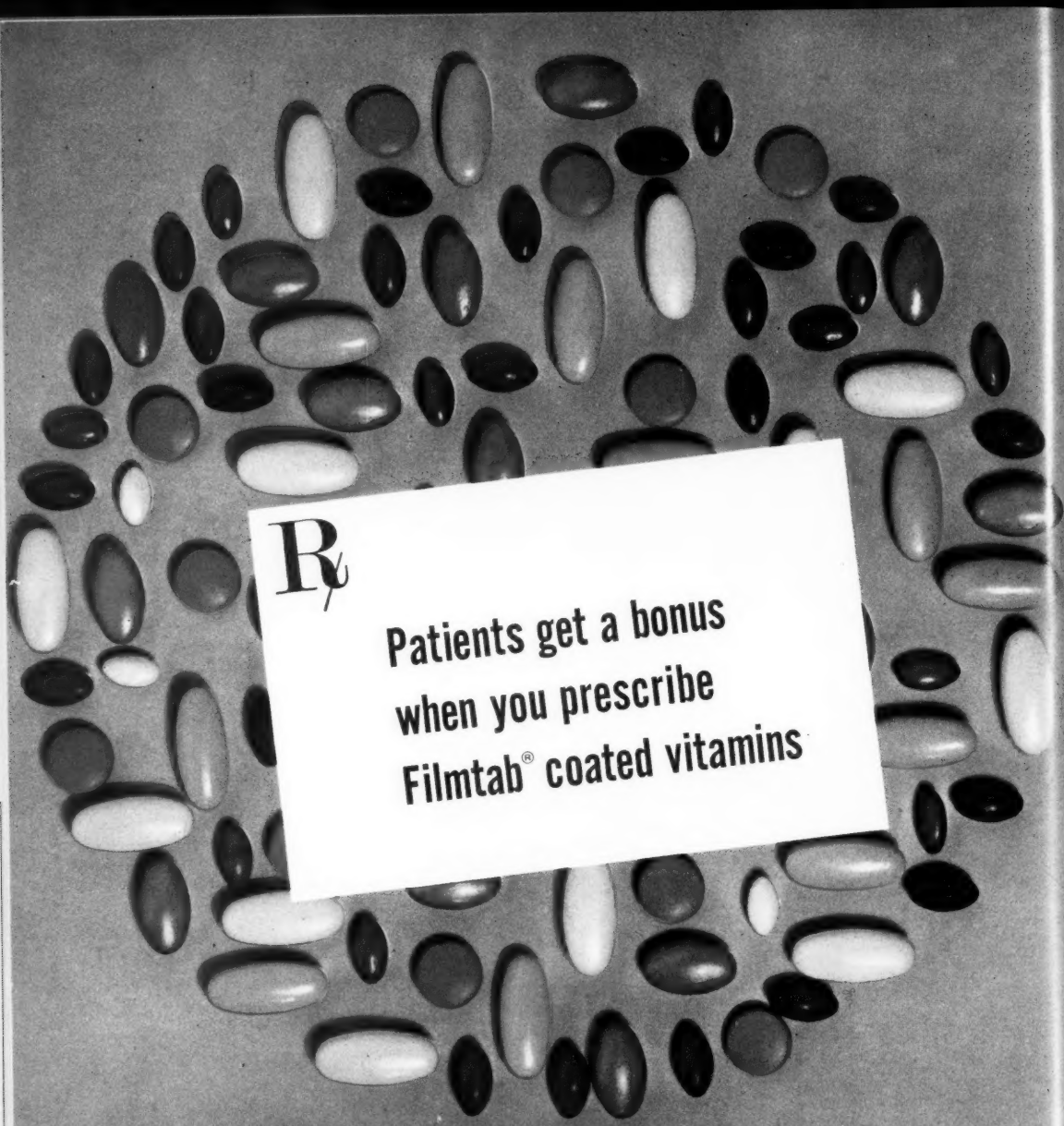

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MAYO CLINIC DIET MANUAL, ed. 3. Committee on Dietetics of the Mayo Clinic. Philadelphia: W. B. Saunders Company, 1961.

The dietary procedures outlined in this manual were developed for the guidance of physicians, dietitians and dietetic interns and nurses of the Mayo Clinic and associated hospitals. Standards set by the Food and Nutrition Board of the National Research Council have been used as a guide to ensure adequacy of the diets. This edition reflects the newer developments in nutrition and recent knowledge of disease in their relationship to diet.

PATHOLOGIC PHYSIOLOGY; MECHANISMS OF DISEASE, ed. 3. Edited by William A. Sodeman, M.D. Philadelphia: W. B. Saunders Company, 1961.

Unlike the usual text, which discusses etiology, pathology, symptoms, and treatment, this work is an attempt to analyze symptoms and signs and the mechanisms of their development. The objective is to enable the student or the physician to understand how and why symptoms appear.

In revising this text, the editor and contributors have maintained the same approach to the subject, but have attempted to reduce the description of normal physiology to the minimum to insure a satisfactory understanding and interpretation of the abnormal. Certain sections have been completely revised or rewritten.

HOSPITALS, DOCTORS, AND DOLLARS. Robert M. Cunningham, Jr. New York, F. W. Dodge Corp., 1961.

What is the role of the hospital in our changing society? How is this vital institution responding to the rapid advances in technological and social areas? What are they doing in the face of rising operating costs? These and other challenging questions are examined in a lively series of reports, consisting largely of the author's behind-the-scenes magazine reports.

The author is editor of *The Modern Hospital* magazine. He writes with an insider's knowledge but an outsider's point of view. Neither attacking nor defending the hospital institution and its activities, he simply describes the symptoms and comments on their significance.

HEALTH EDUCATION, ed. 5. Edited by Bernice R. Moss, Ed.D., Warren H. Southworth, Dr. P.H., and John Lester Reichart, M.D. Washington, D. C.: National Education Association of the United States, 1961.

This book is a project of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association. This edition has been completely rewritten with the hope that it will not only serve as a source book for teachers in the schools and as a text for teacher education, but will also be a valuable reference for physicians and other members of the health professions.

VOLUNTARY HEALTH & WELFARE AGENCIES IN THE UNITED STATES. New York: The Schoolmasters' Press, 1961.

In 1959, an ad hoc committee was created to reassess the functioning of the voluntary health and welfare agencies in the United States. This exploratory study arose from the concern of a group of citizens interested in voluntary agencies, who feared that the multiplicity and complexity of unresolved issues might increasingly confuse the public, undermine public confidence, and endanger the support of all private agencies. This is the report to the public of the committee's study, findings, and recommendations.

WHAT TEENAGERS WANT TO KNOW. Florence Levinsohn, B.A., M.A., in consultation with G. Lombard Kelly, M.D. Chicago: Budlong Press, 1961.

Ephebiatricians and other physicians whose practice includes teenagers will find this small book helpful in meeting the needs of his adolescent patients. Written for the teenaged reader, it is a frank, straightforward presentation of the facts about psycho-sexual-physical-social development in adolescence. Emphasis is on sexual development, since this is the major area of concern for young people. The author also examines some of the problems facing these young people as they approach maturity: the changing sex roles in our society; the conflicting pressures on young people today; the meaning of maturity; the statistics and consequences of early divorce resulting from too-early marriage, and the many sides of marriage.

This booklet is available for distribution only through professional sources.

PREVENTIVE MEDICINE IN WORLD WAR II, vol 5, Communicable Diseases Transmitted Through Contact or By Unknown Means. Medical Department, United States Army, editor in Chief, Col. John Boyd Coates, Jr. Washington, D. C.: Office of the Surgeon General, Department of the Army, 1960.

This is the latest volume in the series of the official history of the Medical Department, U. S. Army, in World War II. While based on a record of past wartime experiences, this book has in it the basis of prevention and control of the diseases discussed in future wars. Some diseases which had lost significance in civilian life became occupational diseases in military circumstances. Some familiar diseases took on strange aspects when they were encountered in foreign lands. Most of the diseases described herein carried a certain mortality, often minimal. Even the mildest, however, were responsible for many lost man-days.

Both common and rare diseases encountered are discussed. The extent of the coverage should make this book valuable to medical students, practicing physicians, and those engaged in preventive medicine.

ALLEGANY-GARRETT COUNTY MEDICAL SOCIETY

LESLIE E. DAUGHERTY, M.D.

Journal Representative

MEDICINE 120 YEARS AGO

Two saddle bags and twenty bottles containing the essentials for every medical need: gentian, nux vomica, magnesium sulphate, tartar emetic, copper sulphate, rhubarb et sod., ipecac, veratrum, aconitum, hellebore, quinine, calomel, guaiac, laudanum, chloroform, lead: sugar of, tincture of opium camp. A compartment for the few surgical instruments, a tourniquet, needles, and thread, served the purpose. What more could one need than fortitude, courage, and a love of humanity.

The above bags and medicine were carried by the late Dr. Charles H. Ohr, born in Funkstown, Washington County, October 19, 1811, and died April 7, 1903, in Cumberland. He brought chloroform to Cumberland in July, 1847; was president of the Medical and Chirurgical Faculty in 1873-1874.

Doctor Ohr was mayor of Cumberland and a state senator. He organized the Allegany County Medical Society in 1868, the first meeting being in his office at the corner of George and Union Street; more of which will appear in a future communication.

SUMMER VACATIONISTS

George M. Simons, M.D., and family, of Cumberland, vacationed in Boston and in Woodstock, Vermont.

Doctor Lewis and **Elizabeth Brings** and family returned to Cumberland after a tour of England, France, and Switzerland.

Joseph Alvarez, M.D., Oakland, vacationed in Newfoundland. **A. E. Mance, M.D.,** and family went to Deep Creek Lake and to Washington, D. C.

William P. Iames, M.D., and family, of Cumberland, visited in Tennessee.

Dr. and Mrs. William A. VanOrmer, vacationed in Canada, while **Richard J. Williams, M.D.,** and family, of Cumberland, enjoyed a stay at Deep Creek Lake, in Garrett County.

Royce W. Hodges, M.D., Cumberland, relaxed at Cacapon Springs, West Virginia. **Leo H. Ley, M.D.,** visited in Marietta, Ohio.

BIRTH

Dr. and Mrs. Ralph A. Reiter, Cumberland, announce the birth of Mark Steven on August 20.

MONTGOMERY COUNTY MEDICAL SOCIETY

CHARLES FARWELL, M.D.
Journal Representative

Charles Farwell, M.D., attended the meeting of the International Congress of Mental Retardation in Vienna, Austria in August.

Seven hundred and seventy-five persons were given polio immunizations in the upper county special clinics, which were held the first week in May. This was about the number anticipated in this effort to bring the immunization level of this area up to that of other parts of the county.

Read N. Calvert, M.D., was elected to the Board of Trustees of the Medical Service of the District of Columbia to represent the Montgomery County and Prince Georges County Societies for the coming year. Doctor Calvert has published two articles for medical journals. One appeared in the March 1961 issue of Medical Annals of D. C. Medical Society, titled "Partial Hepatectomy for Benign Hepatoma." The National Health Magazine, Life And Health, printed an article on "Breast Cancer."

George Sharpe, M.D., with his committee of **Doctors Edward Beeman** and **G. Bowditch Hunter,** along with a committee from Prince George's County Medical Society headed by **David Clayman, M.D.,** met for a roundtable luncheon discussion with the Montgomery-Prince George's County Pharmaceutical Association. The discussion covered problems believed to be of mutual interest. Meetings for the future will be scheduled.

Congratulations to **Doctor and Mrs. James Roberts** on their new daughter, born on June 16. She was named Mary Elizabeth. She will have three brothers and three sisters to keep an eye on her. Congratulations, too, to **Doctor and Mrs. Herbert Jacobs,** who added a girl to the family on July 24. The new arrival was named Tracy. Dr. and Mrs. Jacobs now have one son and four daughters.

Staff honors parting personnel: **John W. Cashman, M.D.,** United States Public Health Service, resident and acting director of Clinical Service, completed this year's residency here on June 30. Doctor Cashman's new assignment is that of a medical advisor in the Peace Corps.

COURSE IN LARYNGOLOGY AND BRONCHOESOPHAGOLOGY

The Department of Otolaryngology, University of Illinois College of Medicine, will conduct a postgraduate course in Laryngology and Bronchoesophagology from April 2 through 14, 1962, under the direction of Paul H. Holinger, M.D.

Registration will be limited to fifteen physicians who will receive instruction by means of animal demonstrations and practice in bronchoscopy and esophagoscopy, diagnostic and surgical clinics, as well as didactic lectures.

Interested registrants will please write directly to the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago 12, Illinois.

Maryland
SOCIETY OF PATHOLOGISTS INC.
EDWARD C. MCGARRY, M.D., *President* MANNING W. ALDEN, M.D., *Secretary*
Annapolis, Md.

GEL-DIFFUSION TECHNIQUES

in clinical immunology

MOST OF US ARE FAMILIAR with the precipitation reaction between antigen and antibody as exemplified by the simple ring test, in which antigen solution is carefully layered over antiserum in a narrow tube and the appearance of turbidity at the interface constitutes a positive test. In 1946, Oudin introduced the idea of incorporating the antiserum in agar gel in a narrow test tube and layering antigen solution above it (termed "single-diffusion"). Bands of precipitate form in the agar depending upon the *number* of precipitating antigen-antibody systems present. The *concentration* of an antigen can be estimated by measuring the distance a band of precipitate travels in the gel in a given time (since antigen excess dissolves an antigen-antibody precipitate, the band of precipitate moves down the *Oudin tube* as more antigen diffuses into the gel).

Ouchterlony, in 1948, developed a double-diffusion method in which antigen and antibody diffuse toward each other from wells made in a flat agar gel formed in a Petri dish. This is a qualitative rather than a quantitative method, but does allow comparison of different antigens or antisera on the same plate.

Because both Oudin tubes and Ouchterlony plates present problems when many precipitating systems are present, Grabar and Williams introduced the immuno-electrophoresis technique in 1953. Here a mixture of antigens are separated by electrophoresis in agar gel on a glass plate; a lateral trough is then cut in the gel alongside the separated constituents and is filled with antiserum, and antigens and antibodies diffuse toward one another (as in Ouchterlony plates) to form arcs of specific antigen-antibody precipitates in the gel. The lines of antigen-antibody precipitates can be colored by different reagents (or different substrates can be added to the gel), to determine the chemical nature of the antigens (carbohydrate, lipid, acetal-phosphatide, protein, nucleoprotein, copper, or certain enzymes). Thus it is now possible to determine the electrophoretic mobility, immunological specificity, and chemical characteristics of a substance in a tissue extract, for example, before any purification procedure is performed.

Future development of Oudin tube methods will allow clinical laboratories to measure the level of serum protein constituents in serum and other body fluids

simply, specifically, and accurately, when unispecific antibodies to each of the serum proteins are available. By means of immunoelectrophoresis, more than thirty different serum protein constituents have been differentiated, although the nature and function of many are still unknown. Oudin tubes and Ouchterlony plates have been used to detect the auto-antibodies to human thyroglobulin which are present in the serum of patients with some types of thyroiditis and are being actively employed in the search for auto-antibodies to tissue antigens in other disease states. Immunoelectrophoresis is useful to diagnose and study agammaglobulinemia, macroglobulinemia, and multiple myeloma and is proving extremely helpful in investigating other rarer anomalies of serum proteins, such as the presence of double albumins and the absence of low density or high density lipoproteins.

CALENDAR OF EVENTS

► Monday, October 16 ◄
PATHOLOGY SECTION, B.C.M.S.

► Tuesday, October 17 ◄
MARYLAND RADIOLOGICAL SOCIETY

► Wednesday, October 18-
Friday, October 20 ◄
MARYLAND NURSES ASSOCIATION AND MARYLAND LEAGUE FOR NURSING
Annual Meeting
Sheraton Belvedere

► Monday, October 23 ◄
MARYLAND ORTHOPAEDIC SOCIETY

► Tuesday, October 24 ◄
JOINT ANESTHESIA STUDY COMMITTEE
8:00 P.M. 1211 Cathedral Street

► Friday, November 3 ◄
BALTIMORE CITY MEDICAL SOCIETY
8:30 P.M. 1211 Cathedral Street
BODY COMPOSITION IN SURGERY AND TRAUMA—
Francis Moore, M.D.

► Monday, November 6 ◄
SACRED HEART HOSPITAL MEDICAL STAFF
11:30 A.M.
School of Nursing
Bellevue Street, Cumberland

► Tuesday, November 7 ◄
MARYLAND SOCIETY OF ANESTHESIOLOGISTS

► Wednesday, November 8 ◄
BALTIMORE CITY DENTAL SOCIETY
Sheraton Belvedere Hotel
3:00 P.M. ORAL MEDICINE AND PERIODONTIA—
Dr. Harry M. Bohannon and Dr. Stephen F. Dachi
6:30 P.M. Dinner
8:00 P.M. Scientific session

MARYLAND SOCIETY FOR MENTALLY RETARDED CHILDREN
GREATER BALTIMORE CHAPTER
Venable Junior High School
Venable Avenue and 34th Street
7:30 P.M. Tour of School
8:45 P.M. THE FUTURE OF THE EDUCABLE CHILD—
Mrs. Katherine Grabbs, Principal, and Faculty of Venable Junior High School

CANCER SECTION, B.C.M.S.
8:30 P.M. Clinical Center, N.I.H.

► Thursday, November 9 ◄
MARYLAND PSYCHIATRIC SOCIETY
8:30 P.M. 1211 Cathedral Street
JUVENILE OFFENDER: DIAGNOSIS, DETENTION AND THE COMMUNITY—Mr. Martin J. Poland
Discussants: Thurman Mott, M.D. and The Hon. Charles E. Moylan

► Tuesday, November 14 ◄
PEDIATRIC SECTION, B.C.M.S.
8:30 P.M. 1211 Cathedral Street
NEUROPSYCHIATRIC AND EDUCATIONAL ASPECTS OF READING DISORDERS IN CHILDREN—
Leon Eisenberg, M.D., and Gilbert Schiffman, Ed.D.

The Heart Page

J. Michael Criley, M.D.—*Editor*

A SERVICE OF
THE HEART ASSOCIATION OF MARYLAND

VECTORCARDIOGRAPHY

Ephraim Glassman, M.D.

ELECTROCARDIOGRAPHIC INTERPRETATION can be achieved by several different methods. One may rely upon specific patterns which have been correlated empirically with clinical and anatomic information. A somewhat less empiric approach depends upon an analysis of the alterations produced by cardiac pathology upon the electrical forces generated by the heart. Specific changes in direction and magnitude of these forces can be predicted from the anatomic and physiologic structure of the heart and in turn correlated with clinically observed lesions. The latter method is the basis of vectorcardiography.

In the early formative years of vectorcardiography, emphasis was placed on qualitative description of the various vector loop configurations which were recorded. Standard electrocardiographic lead systems were modified by Wilson, Burch and others for recording spatial characteristics of the electrical field.

In recent years, many workers have concentrated their efforts on examinations of the effect of variation of the sites of electrode placement upon the electrocardiogram. As a result of the conclusions of Frank, Schmitt and Simonson, McFee and Johnston, Helm, and others, several basically similar "corrected lead systems" have been devised. These systems rely on carefully selected electrode sites for correction of individual variations of body contour and heart position. It is hoped that widespread application of these systems will result in more precise definition of the normal electrocardiogram and the variants produced by organic heart disease.

In order for the clinician to apply the knowledge which has been obtained from vectorcardiographic research, it is not necessary that he have the complex apparatus or special technical knowledge required in the recording of vector loops. A sound understanding of the principles of the method will enable him to make a more rational interpretation of the routine electrocardiogram and frequently to unravel an otherwise perplexing record. By examining the routine record, with an effort to determine the direction and magnitude of the electrical deviations inherent in it, the clinician can utilize the principles of vectorcardiography to great advantage. This will enable him to recognize the alterations produced by ventricular hypertrophy, myocardial infarction, bundle branch block, and various other disease states without memorizing the specific electrocardiographic patterns.

The knowledge gained in special laboratories from application of the newer lead systems should provide more precise information which will allow diagnosis of previously undetected abnormalties. When this information has been thoroughly evaluated, the electrocardiogram will assume even more importance in the diagnostic armamentarium.

BALTIMORE CITY HEALTH DEPARTMENT

HUNTINGTON WILLIAMS, M.D.
COMMISSIONER

P. O. Box 1877 Baltimore 3, Md. Plaza 2-2000: Extension 307

Learn To Do Your Part In The Prevention Of Disease

Jack Redfern Plays TV Family Doctor

MR. JACK REDFERN, of the City Health Department staff, is the new Dr. John Worthington of the "Your Family Doctor" television series, sponsored jointly by the Baltimore City Health Department and the Medical and Chirurgical Faculty of Maryland. Mr. Redfern, who has been assisting with production and script writing of this weekly fifteen-minute series since March 1959, began to portray the television family doctor after the untimely fatal illness of Mr. Robert M. Keller on March 23, 1961.

A graduate of the Johns Hopkins University, in the class of 1939, Mr. Redfern has also studied at the Peabody Conservatory of Music, the Maryland Institute of Art, and the Theordora Irvine Studio for the Theater. During World War II, Mr. Redfern served for five years in the Medical Department of the U. S. Army, progressing from private to captain. His assignments have included the training of medical technicians at Camp Forrest, Tennessee, Officer in Charge of Plans and Training at Moore General Hospital in North Carolina, where he also supervised the training of personnel of two hospitals and other units for overseas service, and duty in the Philippines with the 314th General Hospital in Manila.

In addition to his army medical training, Mr. Redfern has had wide radio, television, and acting experience. Before joining the City Health Department in 1958, he was a TV announcer and producer at WBAL-TV in Baltimore. He has also been a staff announcer at WWIN in Baltimore, WGNY at Newburgh, New York, and WWNC at Asheville, North Carolina. His interest in the theater led to work with theatrical groups in New York, Connecticut, and Maryland. Mr. Redfern assists Mr. Joseph Gordon, Director of the City Health Department's Bureau of Health Information, in the various aspects of community health education work.

"Your Family Doctor," which had its beginning in December, 1948, is guided by a television committee comprising section and bureau directors of the City Health Department. Scripts are written by Mr. John C. Stidman, of the WMAR-TV staff, with the assistance of health and medical advisors who frequently participate on the program. Medical supervision is given by the Commissioner of Health, while production aspects are carried out by Mr. Gordon and Mr. Redfern. The program may be seen on Saturday afternoons at 3:00 P.M. on WMAR-TV, Channel 2. Program listings may be found in the daily papers and in the monthly *Baltimore Health News.*

Huntington Williams, M.D.
Commissioner of Health

MARYLAND TUBERCULOSIS ASSOCIATION
Christmas Seal Agency for State of Maryland
900 ST. PAUL STREET • BALTIMORE 2, MARYLAND

RESULTS OF THE TREATMENT OF TUBERCULOSIS BEFORE AND SINCE THE INTRODUCTION OF CHEMOTHERAPY

H. E. Pugsley, M.D., E. A. Allen, M.B., Ch.B., O. T. Cheung, M.B., H. S. Coulthard, M.B., and G. L. Gale, M.B.

The prognosis of many forms of tuberculosis is greatly improved when at least two drugs are administered for a period of eighteen months. Relapse is also less frequent than in the pre-chemotherapy era.

THE PROPER ADMINISTRATION of chemotherapy has led to a striking improvement in the outcome of the treatment of tuberculosis. If, however, patients with active disease have received inadequate chemotherapy, the cure rate will be lower and the relapse rate higher. All new cases of active tuberculosis, irrespective of the site, should receive combined continuous chemotherapy for about eighteen months or longer. Bed rest is indicated during the early active phase and, in certain selected cases, surgical measures are also necessary.

Three antimicrobial agents have proved to be of great value; namely, isoniazid, streptomycin, and para-aminosalicylic acid (PAS). It is generally agreed that these drugs should not be prescribed alone, but should be given in a combination of at least two. If any one of them alone is prescribed to a patient with open cavitary disease, the tubercle bacilli in the host rapidly develop resistance to the drug, so that it is no longer effective in combating the tuberculous infection. If, on the other hand, two or all three of the antimicrobial agents are given concurrently, the development of resistance by the tubercle bacilli to the drugs administered is markedly delayed, and the drugs continue to be effective in combating the infection for a much longer period.

Isoniazid Essential: Although there is not much difference in the effect of the different combinations, it is generally agreed that isoniazid should be one of the drugs given. It has established itself as the most powerful agent in the treatment of tuberculosis.

In assessing the results of the modern treatment of such a chronic disease as tuberculosis, we are handicapped by the fact that adequate chemotherapy, as we know it, has been in use for little more than seven years—insufficient time for an adequate long-term follow-up. However, since relapses usually occur within a period of five years, the results here reported should be a fair indication of the ultimate prognosis.

Before antimicrobial therapy was available, the

Reprinted from the *Bulletin of the National Tuberculosis Association*, January, 1961.

mortality rate of active pulmonary tuberculosis was estimated to range from 5 per cent in minimal cases to 20 per cent in moderately advanced disease and to 70 per cent in far advanced. The majority of patients with persistent cavitation died within five years.

Modern treatment has resulted in a striking reduction in mortality and relapse rates. At the Toronto Hospital for Tuberculosis we have analyzed the results of treatment of all patients with active pulmonary tuberculosis who were admitted to that hospital in 1953, who had sputum positive for tubercle bacilli, who had not been given antimicrobial therapy before, and who were administered streptomycin, isoniazid, and PAS continuously for at least nine months. The average duration of triple-drug therapy given to the one hundred and forty patients in the series was seventeen months.

At the end of five years, six patients had died, or 4 per cent of the total. All the deaths were in the far advanced group. With adequate chemotherapy, and resectional surgery where indicated, the mortality was strikingly reduced as compared with the prechemotherapy estimates of from 5 per cent (minimal) to 70 per cent (far advanced).

Of the 25 cases of minimal tuberculosis in the series, 100 per cent had attained inactive status by the end of two years, while 97 per cent of 61 moderately advanced cases had become inactive by the end of three years, and 81 per cent of 54 far advanced cases had become inactive by the end of three years. (Inactive, as defined by the National Tuberculosis Association, means that the following conditions had been met for at least six months: repeated examinations of the sputum or fasting gastric contents are negative for tubercle bacilli on culture; the chest radiographs have remained stable in appearance, and there is no evidence of cavitation.) It is evident that if cases of minimal or moderately advanced disease are adequately treated with drugs, one can be confident that the process will in almost all cases become inactive within two years. With far advanced disease, however, a favorable outcome is less certain.

Relapses: In an attempt to find out how many patients relapse after attaining an inactive status, one hundred and twenty-five of the one hundred and forty cases were followed from two to five years. It was found that 4 per cent had relapsed in the period of follow-up. In a series of nine hundred cases treated without chemotherapy or inadequate chemotherapy, reported by the Veterans Administration Hospital, Memphis, Tennessee, 30 per cent had relapsed at the end of three years. The 4 per cent figure has also been reported by the Fitzsimons Army Hospital, Denver, for twenty-five hundred patients adequately treated with drugs and followed from one to five years.

It must be noted that the presence of a persistent cavity in the lung is always a great menace to the patient, whether he has had chemotherapy or not. The presence of a cavity in the lung that has failed to close after six to eight months of chemotherapy is the cardinal indication for surgical resection.

In the Toronto Hospital series, pulmonary resection was performed in thirty-one paitents, or 22 per cent. The resection was segmental in twenty patients; a lobectomy was performed in ten patients, and a pneumonectomy in one patient. All these surgically treated cases became inactive; there were no deaths, but one relapse occurred.

Adequate chemotherapy in bone and joint tuberculosis has resulted in a marked reduction in mortality, more rapid subsidence of active disease, decrease in length of hospital stay, and marked reduction in relapse rate. Nearly half the cases are discharged with movable joints.

Four groups of cases of renal tuberculosis have been followed. In the first group of eighty-two patients who had neither chemotherapy nor nephrectomy, 58 per cent died of tuberculosis. In the next group of three hundred and forty-seven patients treated by nephrectomy but without chemotherapy, 46 per cent died of tuberculosis. Inadequate chemotherapy in one hundred and seventy-five patients led to a moderate reduction of mortality, but in the last group of one hundred and sixty-three patients, adequate chemotherapy resulted in a striking reduction in the mortality to 1 per cent; and a relapse occurred in only 1 per cent of this group.

Summary: The outcome of modern treatment has been compared with that before the use of chemotherapy. Although the follow-up period is not long enough for final assessment, it is evident that combined continuous administration of isoniazid with PAS or with streptomycin, or all three drugs, for eighteen months or longer, has resulted in a striking reduction in the mortality rate and improvement in the relapse rate.

Baltimore Area Council on Alcoholism

(Successor to Maryland Society on Alcoholism)

22 East 25th Street, Baltimore 18, Maryland TU 9-3553

ALCOHOLIC REHABILITATION IN PRINCE GEORGE'S COUNTY

This metropolitan area has done something about alcoholism. The County Health Department set up a far-sighted pilot program which is being watched the country over for its results. Dr. Grant was with the program from its conception and has kindly prepared the following report for this column. The facts that he notes below only begin to convey the impact that this program will have on the county and the general enthusiasm that it has received throughout the community.

Murray Grant, M.D., D.P.H.*

In July 1959, the National Institute of Mental Health awarded $42,980 to assist the first year's operation of a four year demonstration program entitled "A Public Health Approach to the Problems of Alcoholism." The proposal resulted from numerous conferences with the County Medical Society, the Health Department, and other agencies. The program has been operating now for two years. Initially, a psychiatrist, psychologist, and psychiatric social worker were recruited. Frequent discussions were held with magistrates, judges, probation officers, police, ministers, physicians, and representatives of Alcoholic Anonymous, the State Mental Hospitals, and Prince George's General Hospital. From these interested persons the plan of study evolved.

Clinical Activities: A multiactivity rehabilitation clinic is maintained at the Health Department. In two years, two hundred and thirty-one patients have been assisted in this clinic. Initially, patients are interviewed and given a description of the program. Detailed evaluation of the patient's physical condition is made by the family physician, and the patient is advised to continue or obtain care for any non-alcohol illnesses so revealed. This constructive interest in the total picture has been a definite impetus to the treatment of alcoholism. The new patients are assigned to an "introductory group," which consists of three to nine patients who meet weekly. After several sessions conducted by the psychiatrist or social worker, the patient receives further evaluation, then is given individual therapy or therapy in an advanced group. Spouses of alcoholics are also offered group therapy. In 1960, one hundred and thirty-seven patients were treated in the clinic, and four hundred and forty-seven individual sessions with the psychiatrist, psychologist, or psychiatric social worker were held. In that same year, one hundred and six group sessions were held. Presently, three groups for alcoholics and two groups for spouses are being held each week.

Patients are referred to the clinic from many sources. The courts refer 25 per cent, and self referrals or referrals by the immediate family and friends each account for 19 per cent. Private physicians or the Prince George's General Hospital refer 19 per cent. Minister referrals, State Mental Hospital referrals, and Welfare referrals account for the remainder. In one year, eighty-five patients were visited in the Prince George's Gen-

*Health Officer, Prince George's County Health Department.

eral Hospital by a member of the clinic staff to develop early rapport and to motivate the patients to attend the alcoholism rehabilitation clinic upon discharge from the hospital. These patients had a diagnosis of alcoholism; of all sources of referral, these patients had the highest fraction (80 per cent) returning to the clinic for followup treatment.

Integration into Health Department: The regular Health Department staff is vital to the operation of this program. Regular public health nurses aid in finding cases of alcoholism for referral to the clinic and make home visits to patients who have discontinued treatment against the advice of the clinic staff. Such followup often reactivates flagging patient interest. The nurse routinely visits patients discharged from the clinic at intervals of six months to determine employment status, drinking status, and family adjustment. The nutritionist is defining the role of nutrition in the alcoholic's problem as encountered in our clinic material. The Health Education Section has developed educational materials and literature for the alcoholic staff and the general public. The statistician helps plan research projects and evaluate techniques to determine the results of the research programs.

Relationship with other Agencies: The Trial Magistrate's Court and the Circuit Court have referred fifty-one individuals to the clinic for treatment. Such patients are placed on probation and ordered to attend the clinic at regular intervals. A probation officer is specifically assigned to these patients and works in close cooperation with the clinic. Private psychiatrists and physicians, family service agencies, members of Alcoholics Anonymous, representatives of the Welfare Department, and members of the clergy often confer with the staff of the clinic.

Research Projects: All phases of the program are under study to determine their value in the treatment of alcoholism. All personnel participate in this research. The effect of public health nurse case finding and followup on these patients is being evaluated. The role of nutrition in alcoholism as experienced in the clinic is under study by the nutritionist. A comparison of initial characteristics and followup results of patients hospitalized at Spring Grove State Hospital and Prince George's General Hospital is being made. Additional research in a program for industry and a professional education program for physicians and clergy is under study.

Summary: A community wide cooperative program in the rehabilitation of alcoholics in a metropolitan county is under way. Experience in the initial two years of operation has shown the community value of the program.

W. B. SAUNDERS COMPANY features the following recent books in their full page advertisement appearing elsewhere in this issue:

Dripps, Eckenhoff and Vandam—Introduction to Anesthesia
An ideal basic guide to the understanding and safe administration of anesthesia

Corday and Irving—Disturbances of Heart Rate, Rhythm and Conduction
Covers management of *all* the cardiac arrhythmias and conduction defects

STATE OF MARYLAND

DEPARTMENT OF MENTAL HYGIENE

Isadore Tuerk, M.D., Commissioner **Kurt Gorwitz, Statistics Director**

they're going HOME *again*

On September 9, 1932, a 29-year-old woman was admitted to one of Maryland's psychiatric hospitals. There she was diagnosed as depressed with manic episodes. Her treatment progress was slow, with frequent setbacks.

On October 24, 1958, a 55-year-old woman was placed in a foster care home by the hospital's social service department. Within a year she had improved sufficiently for the hospital to parole her in her own custody. Further rapid improvement indicated that she no longer needed the hospital's outpatient services, and she was therefore discharged on September 30, 1960. Twenty-eight years and twenty-one days after her commitment, the girl who had become a middle aged woman in a mental hospital had returned to the community and a productive life.

The foregoing is a summary of an actual case record. The woman described here is one of the increasing number of long-term patients who are now being returned to the community. This upward trend is illustrated by the following data:

These men and women represent a small but growing proportion of what had formerly been considered a custodial population. In 1959, we discharged 4.2 per cent of our long-term patients; by 1961 this had increased to 6.8 per cent.

In recent years we have experienced a persistent decline in the number of patients remaining in our psychiatric hospitals for more than five years. Between 1959 and 1961 this figure dropped 8.3 per cent (from 5,271 to 4,832). This decrease has been due not only to increasing discharges together with slowly declining death rates but also to the fact that most recent admissions are discharged within a few years after hospitalization, and few now become chronic cases.

Despite this gradual improvement, long-term patients still occupy nearly sixty per cent of our hospital beds and require a substantial proportion of departmental services. A major reduction can occur only through the maximum development of all existing and potential resources for rehabilitating the mentally ill.

LIVE DISCHARGES BY LENGTH OF HOSPITALIZATION AND FISCAL YEAR

Length of Hospitalization (Years)	Fiscal Year 1961	1960	1959
5-9	162	151	121
10-19	108	105	67
20 or more	58	50	33
Total	328	306	221

State of Maryland

Department of Health

Perry F. Prather, M.D., Director

301 W. PRESTON STREET, BALTIMORE 1, MARYLAND

Telephone: VErnon 7-9000

Auditory Screening for Infants

AUDITORY SCREENING FOR INFANTS, a fifteen-minute sound and color film, has been produced by the Child Growth and Development Study of the Johns Hopkins University and the Division of Maternal and Child Health of the Maryland State Department of Health. The purpose of the film is to stimulate interest in an auditory screening technique for infants, which is an effective procedure for early detection of hearing impairments and which may also indicate possible abnormalities in motor coordination and mental capacity.

Preliminary plans have been made to establish training institutes at Johns Hopkins for teaching this auditory screening technique to physicians, nurses, and other professional personnel in speech and hearing.

The screening test shown in the film has been used in England for a number of years. It was developed by Sir Alex Ewing of the Department of Education of the Deaf, University of Manchester. In 1957 Dr. Janet Hardy, Director of the Collaborative Cerebral Palsy Project, Johns Hopkins University, sent Miss Anne Dougherty, a public health nurse, to England to study with Professor Ewing. Since that time, Miss Dougherty has been in charge of the screening program at Johns Hopkins. She is the producer of the film.

Medical officials have endorsed the test as a reliable and scientific method to screen infants and have recommended that the test be given as part of an examination of every infant by the time he is eight or nine months old.

AUDITORY SCREENING FOR INFANTS should be of interest to physicians, nurses, health departments, medical and nursing schools, schools of public health, and speech and hearing centers. The price of a print of this film is $130. The charge for preview or rental is $30, which can be applied to the purchase price. This film will be shown without charge to professional groups in Maryland. Copies of the guide to the film are provided. For information write Mr. John F. De Ley, Bureau of Preventive Medicine, Maryland State Department of Health, 301 West Preston Street, Baltimore 1, Maryland.

THE MARYLAND ASSOCIATION of Medical Assistants held its semiannual meeting in Ocean City, Maryland, at the Sea Scape Motel on September 15 and 16. An interesting program included the following speakers: Charles McBeth, PhD., clinical chemist at Peninsula General Hospital, Salisbury, on "The Function of a Clinical Laboratory in Medical Practice"; Lt. Maurice Epple, Crime Laboratory, Baltimore City Police Department, on "Chemical Tests for Intoxication"; and Henry A. Briele, M.D., a surgeon from Salisbury.

A membership drive has been planned to bring more local chapters into the Maryland group. Interest has been shown in both Washington County and Wicomico County.

A delegation of members of the Association are planning to attend the annual convention of the American Association of Medical Assistants in Reno, Nevada, in mid-October. At this time, the Maryland Chapter will be presented with its official charter. An interesting and educational program has been planned for this meeting. Leonard Larson, M.D., president of the American Medical Association, will be the speaker at the annual banquet and installation of officers on Saturday, October 14, 1961.

Mrs. Dorothy E. Holman resigned as president of the local chapter, the Baltimore Association of Medical Assistants, because she has been selected as the executive secretary of the Baltimore County Medical Society. Mrs. Lillian Burford, former vice-president and medical assistant to Doctors Martin W. Krepp, Jr., and William Lumpkin, is the new president.

Charles O'Donnell, M.D., one of the advisors to the Baltimore Association, has resigned because he has been elected president-elect of the Medical and Chirurgical Faculty and has given up all outside commitments. Martin W. Krepp, Jr., M.D., has been named advisor to the group.

The Baltimore Association is planning a Medical Assistants Night at the Vagabond Theatre sometime in November. All medical assistants will receive a circular telling them the date and the title of the play to be presented. Any medical assistant interested in membership in the Maryland Association of Medical Assistants should direct inquiries to the membership chairman, Mrs. Jean Roberson, 6801 Belair Road, Baltimore 6, Maryland. She will, in turn, send you an application blank and pertinent literature.

Dorothy Hartel

The Section on Ophthalmology and Otolaryngology of the Southern Medical Association, will meet in Dallas, Texas, on November 6-9, 1961.

For additional information please contact the secretary, Dr. Albert C. Esposito, First Huntington National Bank Building, Huntington, West Virginia.

Woman's Auxiliary
Medical and Chirurgical Faculty

MRS. WILLIAM S. STONE, *Auxiliary Editor*

OCTOBER, 1961

Reminder

Civil Defense Seminar

On October 31

DON'T FORGET the all-day program on civil defense, which will be held October 31. It will be held at the National Guard Armory, in Pikesville, instead of at the State Employment Security Building. Under the auspices of the Woman's Auxiliary to the Medical and Chirurgical Faculty, this program is open to all women's organizations in the state.

Mrs. John D. Young, Jr., chairman, has announced the following program:

MORNING SESSION:

9:00 A.M. *Registration and Coffee.*

10:00 A.M. *Invocation*—Dr. Iain G. Wilson, Pastor, Franklin Street Presbyterian Church.

10:05 A.M. *Greetings*—Col. F. S. Matthews, Acting Director, Maryland State Civil Defense Agency.

10:10 A.M. *Civil Defense Essential to Survival*—Carey Brewer, Ph.D., Special Assistant to the Director, Office of Civil and Defense Mobilization, Washington, D. C. Introduced by Col. Matthews.

10:45 A.M. *Civil Defense—How the Public Reacts*—Mr. F. Corning Knote, Chairman for Civil Defense for National Parents Committee, Middle Valley, New Jersey.

11:30 A.M. *Health Mobilization*—James K. Shafer, M. D., Director, Health Services, Office of Civil and Defense Mobilization, Washington, D. C. Introduced by Dr. Perry Prather, Commissioner, Maryland State Department of Health.

12:00 Noon *Fallout Shelters and Participation of Youth in Civil Defense*—Mrs. Lois Hazell, Civil Defense Volunteer Worker, Montgomery County, Maryland. Introduced by Mrs. Norman Oliver, President, Woman's Auxiliary to the Medical and Chirurgical Faculty.

LUNCHEON:

1:00 P.M. *Box Lunch* served at the National Guard Armory, Pikesville, Maryland. ($1.50)

AFTERNOON SESSION:

2:15 P.M. *Self-Help Program*—Mr. Donald G. Lederman, Program Representative, Health Mobilization, Public Health Services, Region III, Department of Health, Education and Welfare, Charlottesville, Virginia. Introduced by Dr. John M. Welch, Medical Director, Maryland State Civil Defense Agency.

ACCIDENT SCHOOL for Mothers and Dads

UNDER THE CAPABLE direction of Mrs. Stuart D. P. Sunday and Mrs. William A. Niermann, the Baltimore City Auxiliary last year initiated an Accident School for Mothers and Dads. The objectives of this program are: to familiarize the public with available medical services, such as the Physician's Emergency Service, poison control centers, and accident room services; to teach the public to act intelligently in an emergency until professional help arrives; to provide a free community service; and to foster better public relations between the community and the medical profession.

In order to reach the parents of young children, the program was carried out through the schools in conjunction with the Parent-Teacher Associations. The Co-ordinating Council of the P.T.A. recommended that the program be presented to all local P.T.A.'s during the school year. A doctor addressed the group, answered questions, and presented a "What to do When" type of program.

When the project was first conceived, the Auxiliary obtained the permission of the Baltimore City Medical Society, who agreed to provide speakers for all meetings. The Baltimore Safety Council gave its approval and furnished pamphlets, posters, and other free material on the subject.

Several schools in Baltimore County have requested this type of meeting during the current school year. We would like to see this fine project carried out in all the counties. It can be started by any doctor's wife, even if there is no Auxiliary in her county; but permission from the county medical society must be obtained.